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Survey of Palestine, Jaffa 1937.

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GOVERNMENT OF PALESTINE

DEPARTMENT OF HEALTH

ANNUAL REPORT FOR THE YEAR 1936.

SECTION I.

GENERAL CONSIDERATIONS.

Administration.

Establishment.

1. The establishment of the Department was increased by the inclusion of the following posts :—

A Clinical Assistant
A British Nursing Sister
Two Graduate Nurses
For the Government Infectious Diseases Hospital, Bnei-Braq.

Two British Nursing Sisters for expansion of Government Hospitals, Jaffa and Haifa.

A Quarantine Sub-Inspector for Lydda Aerodrome.

A Clerk Grade 'O' for Government Hospital, Jaffa.

A Medical Officer i/c Mobile Medical Unit, Trans-Jordan.

An Assistant Sanitary Inspector Grade 'O(A)'.
A Laboratory Assistant Grade 'N'.
For Soap Control.

The following promotions, honours, and changes of titles occurred in the Departmental Establishments :—

Miss M.G. Sutherland
Miss W.M. Farrer
Miss A.A. Byrne
Promoted to Special Grade LP.180—12—240.

(a) Dr. W.E. Thompson, Specialist, was appointed Officer of the Order of the British Empire.

(b) Mr. Farid Ibrahim Haddad, Inspector of Pharmacies, was appointed Honorary Member of the Order of the British Empire.

The titles of the undermentioned posts have been changed :—

Surgeon Specialist to Specialist.

Women Medical Officers to Lady Medical Officers.

The following salary scales have been approved for the Technical Staff of the Department.

Office	Grade	Salary Scale
Laboratory Assistant.	M	LP.288—12—360
Laboratory Assistant.	N	LP.180— 8—276
Dispensers.	N	LP.180— 8—276
Sanitary Inspector.	—	LP.240—10—280
X-Ray Attendant.	O(A)	LP.140— 8—172 or LP.144— 6—180
Asst. Sanitary Inspector.		
Quarantine Sub-Inspector.		
Laboratory Attendant.		
Disinfecting Mechanic.		
Graduate Nurse.	Higher Grade.	LP.124— 8—156
Asst. Infant Welfare Supervisor.	—	LP.124— 8—156
Housekeeper.	...	LP. 84— 8—124
Asst. Dispenser.	—	LP. 92— 8—132
Sanitary Sub-Inspector.	—	LP.100— 8—132
Quarantine Sub-Inspector.	—	LP.100— 8—132
Laboratory Attendant.	—	LP. 92— 8—132
Graduate Nurse.	Lower Grade	LP. 92— 8—124
Antimalarial Sub-Inspector.	—	LP. 68— 8—100
Quarantine Sub-Inspector.	—	LP. 68— 8—100

Vacancies in the Department's establishment were filled by the appointment of :—

Mr. M.B. Pinkus, Storekeeper Grade 'L' replaced Mr. A.B. Heron, M.B.E., retired.
Dr. S.M. Katkhuda, Medical Officer, replaced Dr. S. Livni, resigned.
Miss E. I. Crawford, British Nursing Sister, replaced Miss E.I. Green, resigned.
Miss A. Wardropper, British Nursing Sister, replaced Miss D.E. Sadlier.
Mrs. E. O'Rourke, British Nursing Sister, replaced Miss I.M.L. Budd, resigned.
Miss O.E. Collard
Miss M.G. Morris
Miss E.H. Edwards
Miss S.G. Raine
} To fill new posts and complete establishment of British Nursing Sisters.
Miss E. Davies, transferred to the post of Superintendent of Midwifery.
Dr. R.A.R. Khayri, Clinical Assitant, replaced Dr. S.A. Hamadeh, resigned.
Dr. Kurt Marberg, Clinical Assistant, to complete establishment.
Dr. S.A. Jones, Medical Officer i/c Mobile Medical Unit for Trans-Jordan.

The following was the distribution of staff at the end of the year :—

HEADQUARTERS AND DISTRICT ADMINISTRATION.

Appointment	Grade	Name	Station
Director of Medical Services.	"C"	Col. G.W. Heron, C.B.E., D.S.O.	Headquarters Jerusalem.
Deputy Director Medical Services.	"E"	J.W.P. Harkness, O.B.E.	,,
Deputy Director Medical Services. (Laboratory Section).	"E"	G. Stuart, O.B.E.	,,
Senior Medical Officer (Samaria and Galilee).	"F"	W.K. Bigger, O.B.E., M.C.	Nablus.
Senior Medical Officer (Sanitary and Epidemic Section).	"F"	W.P.H. Lightbody.	Headquarters Jerusalem.
Specialist.	"F"	W.E. Thompson, O.B.E.	Jerusalem.
Senior Medical Officer (Haifa & Quarantine).	"F"	J. Macqueen.	Haifa.
Senior Medical Officer (Epidemic Diseases).	"F"	N.M. Maclennan.	Headquarters Jerusalem.
Senior Medical Officer (Railways).	"F"	J.H. Thompson.	Haifa.
Senior Medical Officer (Jaffa & Gaza Districts).	"F"	V.L. Ferguson.	Jaffa.

APPOINTMENT	GRADE	NAME	STATION
Senior Medical Officer (Jerusalem District).	"F"	J.H. Pottinger.	Jerusalem.
Assistant Senior Medical Officer.	"H"	D. Boulos, M.B.E.	Jerusalem.
-do-	"H"	R. Oplatka, M.B.E.	Tel-Aviv.
-do-	*"H"	H. Abu Rahmeh, M.B.E.	Amman.
-do-	"H"	M. Shishmanoglou, M.B.E.	Haifa.
-do-	"K"	Z. Haddad, M.B.E.	Jaffa.
Inspector of Pharmacies.	"K"	Farid I. Haddad.M.B.E.	Hqrs.J'lem
Office Superintendent.	"K"	C. Morrall.	"
Storekeeper.	"L"	M.B. Pinkus.	"

HOSPITAL AND MEDICAL SERVICE.

APPOINTMENT	GRADE	NAME	STATION
Lady Medical Officer.	—	S.M. Young.	Jerusalem.
-do-	—	J. McDowall.	Haifa.
Medical Officer (Hospital).	"K"	Y. Hajjar, M.B.E.	Jerusalem.
Medical Officer (Mental Hospitals and District)	"K"	M.S. Malouf.	Bethlehem.
Medical Officer (Casualty Post, Ophthalmic Clinic and Schools).	"K"	S. Bodossian.	Ramle.
Medical Officer (District, Ophthalmic Clinic and Schools).	"K"	A.A. Shehadeh.	Acre.
Medical Officer (Hospitals and Schools).	"K"	H.S. Khalidi.	Jaffa.
Medical Officer (Schools).	"K"	K. Kesheshian.	Jaffa.
Medical Officer (Hospital).	"K"	N. Hamzeh.	Haifa.
Medical Officer (Hospital and Ophthalmic Clinic).	"K"	A.T. Sternberg.	Safad.
Medical Officer (Hospital).	"K"	I. Itayim.	Gaza.
Medical Officer (Ophthalmic Clinic).	"K"	S. Shihab.	Hebron.
Medical Officer (Casualty Post, Ophthalmic Clinic and District).	"K"	S. Saleem, O.B.E.	Beersheba.
Medical Officer (Special Clinic).	"K"	F. Abla.	Hebron.
Medical Officer (Ophthalmic and Clinic).	"K"	D.K. Mikhail.	Majdal.
Medical Officer (Ophthalmic).	"K"	M.S. Musa.	Majdal.
Medical Officer (Hospital).	"K"	A.A. Sururi.	Nablus.
Medical Officer (X-Ray duties).	"K"	E. Kleinhaus.	Jerusalem.
Clinical Assistant.	—	Assad Bishara.	Jerusalem.
-do-	—	Said Dajani.	Jaffa.
-do-	—	R.A.R. Khayri.	Haifa.
-do-	—	K. Marberg.	Bnei-Braq.
Matron.	Special	Miss I.E. Cowan.	Jerusalem.
-do-	"	Miss L.J. Hanson.	Nablus.
-do-	"	Miss I.G. Cooper.	Haifa.
-do-	"	Miss M.G. Sutherland.	Safad.
Matron, Mental Hospital No.1.	"	Miss F.I. Channell.	Bethlehem.
Matron, Mental Hospital No.2.	"	Miss A.A. Byrne.	Bethlehem.
Matron.	"	Miss W.M. Farrer.	Jaffa.
Superintendent of Midwifery.	"	Miss E. Dickin.	Hebron.
-do-	"	Miss E. Davies.	Gaza.
-do-	"	Miss V.W.E. Rogers.	Jerusalem.
-do-	"	Miss C.M. Beville.	Nablus.
-do-	"	Miss L.B. Fielder.	Jaffa.
British Nursing Sister.	"	Miss H.M.P. Roulstone.	Bnei-Braq.
-do-	"	Miss L.B. Walker.	Jaffa.
-do-	"	Miss J. Hadden.	Haifa.
-do-	"	Miss B.L.J. Gandour.	Haifa.
British Nursing Sister (Mental Hospital No.1)	"	Miss A.M. Hunter.	Bethlehem.
British Nursing Sister.	"	Miss J.I.H. Farrer.	Haifa.
British Nursing Sister (Mental Hospital No.2).	"	Miss C.J. Brown.	Bethlehem.
British Nursing Sister.	"	Miss W. Wilson.	Jerusalem.
-do-	"	Miss E. O'Rourke.	"
-do-	"	Miss E.I. Crawford.	"
-do-	"	Miss A. Wardropper.	"

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* Seconded as Director of Public Health, Trans-Jordan.

APPOINTMENT	GRADE	NAME	STATION
British Nursing Sister.	Special	Miss M.G. Morris.	Haifa.
-do-	"	Miss O.E. Collard.	Jaffa.
-do-	"	Miss E.H. Edwards.	Jerusalem.
-do-	"	Miss S.G. Raine.	Haifa.

SANITARY AND EPIDEMIC.

Sanitary Engineer.	Special	M.Y. Samaha.	Hqrs.J'lem
-do-	"	L.T. Colburn.	"
Assistant Sanitary Engineer.	"K"	G.R.P. Witts.	"
Medical Officer.	"K"	J. Tucktuck.	Nazareth.
-do-	"K"	A. Abdel Al, O.B.E.	Hebron.
-do-	"K"	A. Abu Ghazaleh.	Gaza.
-do-	"K"	G.E. Ayoub.	Jaffa.
-do-	"K"	K. Eid.	Nablus.
-do-	"K"	I. Haurani.	Ramallah.
-do-	"K"	M.A. Shukair.	Jerusalem.
-do-	"K"	Taher el Khatib.	Jenin.
-do-	"K"	S. Btesh.	Jaffa.
-do-	"K"	F.I. Haddad.	Haifa.
-do-	"K"	F. Shubeita.	Jaffa.
-do-	"K"	A.M. Shehadeh.	Jerusalem.
-do-	"K"	E. Sukkarieh.	Safad.
-do-	"K"	A.I. Haddad.	Ramleh.
-do-	"K"	H.M. Torian.	Haifa.
-do-	"K"	A.K. Khartabil.	Tulkarm.
-do-	"K"	J.M. Shapiro.	Haifa.
-do-	"K"	S. Bishara.	Nablus.
-do-	"K"	S.N. Barnick.	Tiberias.
-do-	"K"	Ibrahim Ali Alamuddin.	Hqrs.J'lem.
-do-	"K"	Rafat Amin Faris.	Jerusalem.
-do-	"K"	S.M. Katkhuda.	Jerusalem.

QUARANTINE SECTION.

Medical Officer.	"K"	M.K. Mishalany.	Jaffa.
-do-	"K"	B. Franco.	Haifa.
-do-	"K"	Karl Roch.	Haifa.

LABORATORY SECTION.

Government Analyst.	"G"	G.W. Baker.	Labs.J'lem.
Senior Bacteriologist.	"H"	K.S. Krikorian.	"
Assistant Bacteriologist.	"K"	A. Malchi.	Haifa.
-do-	"K"	M.S. Dabbagh.	Jerusalem.
-do-	"K"	R. Reitler.	Jaffa.
Assistant Analyst.	"K"	W.J. Itayim.	Jerusalem.

Training of Personnel.

2. Dr. S. Saleem, O.B.E., was granted a scholarship to undergo the course for the Diploma of Tropical Medicine and Hygiene at the Liverpool School of Tropical Medicine and Hygiene.

Dr. Ibrahim Itayim, was granted a scholarship to undergo a course of study at the British Post-Graduate Medical School, Hammersmith Hospital, London.

9 Probationer Nurses of the Department completed their training and qualified as graduate nurses.

5 Graduate Nurses and 11 pupil midwives were trained and awarded the Certificate of Midwifery.

2 Medical Officers had a month's training, 1 nurse had a four months' course, 1 a two months' course, and 1 nurse was given a refresher course at the St. John's (Ophthalmic) Hospital at Jerusalem.

9 tamurgis had 4 months' training at Government Ophthlamic Centres.

8 classes in First Aid were held. The following passed the examinations :-

	Certificates	Vouchers	Medallions	Labels
Department of Health Personnel.	23	3	—	—
Police.	76	12	8	2
Others.	24	5	—	—
Totals.	123	20	8	2

A Departmental elementary course in sanitation was held during February and March. 29 candidates attended the course, of whom 16 passed the examination.

Ordinances and Regulations.

3. The following ordinances, regulations, rules etc., affecting public health were promulgated during 1936 :—

ORDINANCES.

	Published in Gazette No.
MUNICIPAL CORPORATIONS (SEWERAGE, DRAINAGE AND WATER) ORDINANCE, 1936, enacted and made applicable during the year to the Municipal Corporations of Jerusalem, Haifa, Jaffa, Tulkarm, Nablus and Jenin.	260 2-1-36.
DANGEROUS DRUGS ORDINANCE, 1936 — (The Dangerous Drugs Ordinances, 1925-1928 and 1932 repealed).	577 19-3-36.
NURSING SISTERS PENSIONS (AMENDMENT) ORDINANCE, 1936.	612 16-7-36.
TOWN PLANNING ORDINANCE, 1936 — Enacted in Gazette No.620 of 6-8-36 to take effect on 7-8-36. (Town Planning Ordinances 1921-1922 and 1929 repealed).	589 4-5-36.
CRIMINAL CODE ORDINANCE, 1936. — Sections affecting Public Health.	652 14-12-36.

5 (last para) — Definition of "Wound".
13 — Presumption of sanity.
14 — Insanity.
15 — Intoxication.
113 — False certificates.
189 — Common nuisance.
195 — Negligent act likely to spread infection of diseases.
196 (1) & (2) — Sale of things unfit for food or drink.
197 — Selling food which is unclean.
198 — Fouling water.
199 — Fouling air.
200 — Offensive trades.
220 — When child deemed to be person.
243 (e), (f) & (g) — Reckless and negligent acts.
279 — Concealing registers.
308 — Obtaining registration etc. by false pretence
316 — False accounting by Public Officers.
347 — Falsification of register.
380 (d), (e) & (h) — Street offences.
387 — Disclosure of secret information by professional men.

LAW OF EVIDENCE (AMENDMENT) ORDINANCE, 1936 — Evidence by single witness accepted when corroborated by material evidence.	630 18-9-36

RULES AND REGULATIONS.

PUBLIC HEALTH ORDINANCE, — Order applying the Ordinance and Regulations to certain Registration Blocks in Ijlil El Qibliya village (Ra'anana).	621 13-8-36.

DUNGEROUS DRUGS ORDINANCE, 1936 —	
a) Rules 1936.	635 1-10-36.
b) Codeine and Dionin Rules, 1936, (Bona fide licensed chemists allowed to trade in).	-do-
c) Methylmorphine and Ethylmorphine Rules, 1936, (Pharmacists required to record sales of).	-do-
QUARANTINE ORDINANCE, —	
a) Rat Prevention Rules, 1936.	538 16-4-36.
b) Quarantine (Amendment) Rules (No.2) 1936; exempting the following classes of vessels from payment of dues and fees; (a) Ships of War. (b) Government Vessels. (c) Troop Ships. (d) Vessels in Distress. (e) Vessels etc., registered in Palestine. (f) Yachts. (g) Palestine fishing vessels. (h) Cable and Telegraph Boats.	655 31-12-36.
c) Quarantine (Amendment) Rules, 1936, empowering Director of Medical Services to waive quarantine fees.	627 10-9-36.
TRADES AND INDUSTRIES (REGULATION) ORDINANCE, —	
Trades and Industries (Amendment) Rules, 1936. Substitution of the expression "Director", Department of Health or Officer authorized by him" for "Medical Officer" wherever the latter occurs.	610 2-7-36.
Applying the Ordinance to certain trades in Classes I, II, & III of the 1st Schedule to certain villages in the Northern and Samaria Districts.	565 23-1-36.
Addition of Poultry Slaughtering Shops and Butter Packing Shops to Class III of Schedule I of the Ordinance.	577 19-3-36.
MEDICAL PRACTITIONERS ORDINANCE, --	
Notification of Address Rules, 1936 (Amended in Gazette No.598 of 28-5-36).	575 12-3-36.
DENTISTS ORDINANCE, —	
Change of Name Rules, 1936.	611 9-7-36.
Lost Licences Rules, 1936.	614 23-7-36.
Notification of Address Rules, 1936.	601 4-6-36.
PHARMACISTS ORDINANCE,—	
Notification of Address Regulations, 1936.	626 3-9-36.
CUSTOMS ORDINANCE,—	
Import of bristles for the manufacture of shaving brushes are subject to examination and approval by Department of Health.	601 4-6-36.
ANIMAL DISEASES ORDINANCE, —	
Slaughter House Rules, 1936, for Bethlehem and Beit Jala.	562 16-1-36.
Slaughter House (Amendment) Rules, 1936. Slaughtering of Swine in Jerusalem to be at the Public Slaughter House.	607 25-6-36.
Slaughter House Rules, 1936: Forbidding slaughtering of animals in Jerusalem out-lying localities.	577 19-3-36.
WORKMEN'S COMPENSATION ORDINANCE, —	
Workmen's Compensation Rules, 1936.	611 9-7-36.

MUNICIPAL BYE-LAWS.

MUNICIPAL CORPORATIONS ORDINANCE, 1934 —

Safad Municipal (Amendment) Bye-Laws 1936, Markets.	619 6-8-36.
Jerusalem (Slaughter House) Bye-Laws 1936.	624 20-8-36.
Jerusalem Municipal (Market) Bye-Laws, 1936.	577 19-3-36.
Beersheba (Water Supply) Bye-Laws, 1936.	642 29-10-36
Beersheba (Street Trades) Bye-Laws, 1936.	604 18-6-36.
Bye-Laws of the Shefa Amr Council, 1936. (a) Maintenance of cleanliness of streets and prevention of litter. (b) Storage of refuse. (c) Abating of nuisance.	591 7-5-36.

RAMAT GAN LOCAL COUNCIL ORDER, 1926 —

Bye-Laws 1935-36 (Amendment). Local Council authorized to collect fees from house owners or occupiers for collection of refuse.	579 26-3-36.

BILLS PUBLISHED.

EMPLOYMENT OF WOMEN AND CHILDREN BILL 1936 —	570 6-2-36.
WORKMEN'S COMPENSATION BILL 1936 —	583 16-4-36.
SAFEGUARDING OF PUBLIC WATER SUPPLY BILL, 1936.	591 7-5-36.

4. The following is a summary of the estimates of expenditure for the financial year 1936-37.

Revenue and Expenditure.

REVENUE		EXPENDITURE	
1-4-36 to		A. Personal Emoluments.	LP.133,282
31-3-37.	LP.31,806.	B. Other Charges	LP. 75.473
		C. Special Expenditure	LP. 34,076
			LP.242,831

N.B. The above sum includes provision of LP.11,078 under Personal Emoluments and LP.29,287 under Other Charges and Special Expenditure for new and expansion of existing services which were not approved.

DETAILS OF OTHER CHARGES APPROVED.

	£P.
Transport and Travelling.	9,332
Railway Fares and Freight.	1,900
Lighting, Heating and Electric Supply.	2,953
Equipment and Medical Supplies.	12,977
Disinfectants and Maintenance of Disinfecting Machines.	2,876
Clothing.	2,337
Epidemic Outbreaks.	200
Antimalarial Measures.	3,412
Hospital Diets.	16,394
Medical Attendance in Private Hospitals.	600
Relief.	25
Contribution to Jewish Health Services.	15,199
Contribution to Tropical Diseases Bureau.	60

	£P.
Contribution to Seamen's Hospital.	11
Contribution to Colonial Medical Fund.	100
Contribution to London School of Hygiene and Tropical Diseases.	100
Fees for notification of Births and Deaths in Villages. ...	600
Medical Library.	80
Expenses of Officers attending Courses of Instruction. ...	100
Telegrams, Telephones and Postage.	1,485
Grant to Trans-Jordan Government.	1,293
Contribution to Palestine Railways for part time services of Medical Officer on Kantara-Rafa Railway.	170
Contingencies.	200
Samples of Foodstuffs.	50
Scholarships.	510
Typewriters and Duplicators.	75

DETAILS OF SPECIAL EXPENDITURE APPROVED.

Motor Ambulances.	520
Matting and Frames for Shelters.	50
Village Sanitation.	1,300
Grant to Hebrew University for Anti-Malarial Research.	163
Deratisation Barge.	40
Laundry Equipment for Hospital, Jerusalem.	15
Disinfecting Lorry.	321
Furniture for Infectious Hospital, Bnei-Braq.	1,300
Grant to Tel-Aviv Refugees' Committee.	111
Grant to Tel-Aviv Hospital.	1,713
Grant to Trans-Jordan Government.	1,172
Drainage of Birket Ramadan.	2,915
Antimalarial Drainage Schemes.	2,780

The comparative total figures of estimates of revenue and expenditure for previous years are given below :—

Year	Revenue £P.	Expenditure £P.		
		Personal Emoluments	Other Charges	Total
1935-36	18,450	111,192	99,870	211,062
1934-35	14,200	102,659	59,044	161,703
1933-34	11,540	89,734	47,420	137,154
1932-33	10,330	81,050	33,951	115,001
1932 (1st quarter)	2,488	19,785	7,591	27,376
1931	9,950	79,140	32,201	111,341
1930	9,860	76,143	32,408	108,551
1929	10,353	73,694	29,885	103,579
1928	10,480	76,080	31,380	105,460
1927 (9 months)	7,320	52,948	24,955	77,903
1926-27	13,830	68,987	28,692	97,679
1925-26	9,050	63,140	21,341	84,481
1924-25	9.570	61,791	20,362	82,423
1923-24	11,590	64,226	29,032	93,258
1922-23	8,720	72,508	32,860	105,368
1921-22	8,158	70,914	82,795	153,709*
				* Less estimated cost of Railway Medical Service — £P.10,824

The Palestine Government estimates of revenue and expenditure for the financial year under review was as follows :—

Revenue — LP.5,545,937. Expenditure — LP.6,210,447.

The estimated expenditure of the Department is, therefore, 3.9% of the total estimated expenditure of the Governement.

FINANCE.

General.

5. The originally estimated expenditure for 1936-37 was LP.242,831 that is LP.31,769 in excess of the approved Estimates for 1935-36.

The estimates, however, did not receive approval during the year 1936, and expenditure on the basis of the provision of 1935-36 only was permitted, except in the case of special appointments or services expressly approved for which Special Warrants were granted.

Thus in the whole financial year 1936-37 LP.11,078 under Personal Emoluments and LP.29,287 under Other Charges and Special Expenditure for new or expansion of existing services were not approved.

It follows that there were no new services established and no material expansion of existing services to record.

Owing to the disturbances, and particularly to the large number of severe cases from the Army and R.A.F. admitted to Government Hospitals or given treatment, the amount of surgical work both in and out of hospital increased considerably. On account of the poverty and semi-starvation of the women and children, there were much larger attendances at the Department's out-patients clinics. These factors resulted in a considerable increase in the use of drugs and dressings, and it was necessary to ask for a credit of LP.2,600 to purchase additional supplies.

Although the normal work of the Department continued in all districts in spite of the dangerous state of the country from May to October, there was some curtailment of travelling by Senior Officers, and a saving was effected under the Travelling and Transport Vote.

Personnel.

6. The British Nursing Staff was found to be inadequate, due to the increased work occasioned by casualties in the disturbances and to the sickness of two. Four additional British Nursing Sisters were authorised as an urgent increase. A special credit for LP.76 was necessary on this account.

Village Sanitation.

7. LP.2,975 was expended during the year of which LP.1,100 on material and LP.1,865 on labour in the installation of 4,708 village latrines. As a result of experience and by organisation of the work resulting therefrom, the cost of the individual bored-hole latrine worked out at LP.0.534 and of the tar-barrel latrine LP.0.322 per latrine. The cost of labour in each case depended on the nature of the soil.

Antimalarial Projects.

8. The majority of the major projects put forward in the Draft Estimates were not approved. Recurrent credits available under Antimalarial Measures were LP.3,412 and Capital Credits specially approved or carried forward were LP.5,695.

After considerable expenditure on major schemes of antimalarial reclamation and drainage in 1935 only a comparatively small programme was possible in 1936. The large scheme at Birket Ramadan still required a credit of LP.2,915 to complete the work at the originally estimated total. It was, under the circumstances, difficult to carry on the work according to schedule owing to restriction in the use of dynamite, our stock of which had to be removed and was used by the Army for punitive demolition works.

A credit of LP.1,500 was approved to canalize the Wadi Falik, a continuation of the Birket Ramadan wadi, as a measure of protection from malaria of the new military camp a few kilometres north of Nathania. The work proceeded actively. LP.1000 was spent during the year and LP.500 was carried forward to be spent in 1937-38.

Unexpended credits of LP.980 carried forward from 1935 to complete the Wadi Rubadieh, Ain Mudawara and Ain Tineh in connection with the Tiberias Lake Shore work were expended in filling and canalisation works in this region. The recurrent work on the actual Lake Shore was continued, the cost by agreement to be met ¾ by the Palestine Electric Corporation and ¼ by Government.

The sum of LP.3,412 on antimalarial measures of a recurrent nature was expended, chiefly on staff to supervise annual works of clearance of wadis, etc. prescribed by the Department under the terms of the Ordinance, in maintenance of major projects already completed, and on work on State Domain or areas of disputed ownership.

Expansion of Infant Welfare.

9. Immediately following the disturbances the Department represented the appalling state of poverty amongst the women and children attending at our urban Clinics and Infant Welfare Centres. A credit of LP.200 was authorized for issue of soup and milk to under-nourished pregnant women and infants.

Relief.

10. A grant of LP.111 was made to the Tel-Aviv Refugee Committee for relief of poor Jews.

Hospitals & Departmental Buildings.

11. New construction of departmental buildings included in P.W.D. programme for 1936-37 was entirely suspended, and there was, therefore, no advance in the project for the new Mental Hospital, the reconstruction and addition to the building at Nazareth to provide a Tuberculosis Sanatorium-Hospital, the expansion of Nablus Hospital, the construction of Ramleh Hospital, the Nurses' Quarters at Safad Hospital to allow expansion of bed strength of the Hospital, the Maternity Block at Jaffa, or the Infectious Hospital at Jerusalem. There was, therefore, no expansion of hospital beds to meet the expansion of the population whether for General or Infectious cases. It was decided, however, to proceed with the project of construction of the new Government Hospital, Haifa, on the Carmel Convent Site at a credit of LP.100,000, and a private architect was employed in September to prepare plans and specifications. The fees, estimated at 10% for Architect, Quantity Surveyor, Consultants' fees and Clerk-of-Works were to be payable out of the credit voted.

Various.

12. A sum of LP.17,000 was voted for improvement of Village Water Supplies, and 34 schemes were carried out at a cost of LP.10,630.

Authority was received towards the end of the financial year to incur expenditure on (a) replacement of an unserviceable ambulance and lorry, and to order two disinfecting vans, (b) to appoint a Medical Officer for the Jewish Colonies of Jaffa District and two Inspectors.

PUBLIC HEALTH.

General.

13. The general health of both the Arab and Jewish population was remarkably satisfactory in spite of disturbances and the privations that were experienced, particularly amongst the Arabs in urban areas, owing to the strike.

There were no epidemics. The incidence of enteric fever at 1,318 cases was about half of that of the year 1935, dysentery was not unusually prevalent, and the incidence of malaria was exceptionally low.

The situation of unrest and disturbance in Palestine from May to October presented great difficulties in carrying out the services of the Department, particularly those in the rural districts where the personnel of the Department were in constant danger of attack when in the pursuance of their duties.

It is, however, to the credit of the personnel of the Department, British, Arab and Jewish, that they, with very few exceptions, carried on their duties both urban and rural with the greatest loyalty and devotion, with the result that hospital, clinic, and infant welfare services, though materially increased, were conducted without interruption. First aid in casualties amongst troops, police and civilians was readily available, and in certain instances gallantly administered, by the Department's medical officers and by voluntary and charitable medical organisations and units.

The British sections were seriously overcrowded, 24 patients at one time in the 16 bed section in Jerusalem, and the Specialist in Jerusalem and the S.M.O. Railways, surgeon to the hospital at Haifa, carried out the bulk of the major surgery for the Army and R.A.F. casualties in those two centres.

It is now quite clear, vide Surgeon Specialist's report on page 40, that in the British section in Jerusalem, there is a definite need for more beds permanently. The British Police Force has been increased considerably and their married strength doubled to 118. There is a general increase of

British Government officers and many more children, and the number of Army officers' wives and children continue to expand.

Similarly at Haifa and Jaffa additional hospital provision will be required, and an Assistant British Surgeon to assist in Jerusalem and relieve Surgeons in turn when on leave or sick is now essential. Proposals have been put forward to Government in this sense.

Birth & Death Rates.

14. The infant mortality at 121 per 1000 was the lowest yet recorded in Palestine; the birth rate was maintained at its remarkably high figure of 44.88 per 1000 living and the death rate at 16.11 was the lowest yet recorded.

Births and deaths were registered punctually, since the normal services of the Department, as explained, continued unabated.

Developments Affecting Public Health.
Town Water Supplies.

15. The Jerusalem water supply was completed in the spring of 1936 and the softening and filtration plants installed later in the year.

The chloramine plant at Saris, the last pumping station, proved uniformly effective, and a pure supply even without filtration was secured. The reticulation in the town has not yet been completely renewed, and there is still some danger, with an intermittent household supply, of contamination from leaking mains.

The water supplies of Nazareth, Tulkarm and Ramleh were improved and work was commenced on those of Jaffa and Khan Yunis.

Consulting Engineers were employed on schemes for Haifa, Tel-Aviv and a major scheme for Jaffa, but the projects were not commenced. Meanwhile, at Haifa, a private company established an additional and satisfactory supply from shallow wells in the sand dunes near the seashore in Haifa Bay.

Village Water Supplies.

16. The programme of improvement of existing village water supplies was considerably hampered. 34 schemes were approved by the Committee at an estimated cost of LP10,630. Of these, 24 were wells in the quasi desert of South of Beersheba, where lack of water for the Bedawin tribes was a cause of much distress. The number of schemes now completed is 189, and has resulted in relieving the water shortage in a large number of villages, and at the same time has secured a comparatively pure water supply in instances where water had previously been drawn under the most insanitary conditions. The full effect of an increased and clean water supply in these villages will only be realized when the next drought occurs.

In the case of Jewish settlements, the water supplies are almost invariably established by the promoters, and assistance in improvement of existing supplies was only necessary in a few cases.

Drainage.

17. The extension of the main drainage of Jerusalem did not materially advance. The Consulting Engineers' schemes for Haifa, Jaffa and Tel-Aviv were drawn up towards the end of the year.

Village Sanitation.

18. Village latrine installation continued throughout the year. 3,829 latrines were installed in Majdal, Gaza and Ramleh districts, in the villages of which nearly every house now has its latrine. In Jerusalem area 384 double-tar barrel latrines were installed. There is a keen demand on the part of the villagers for the installation of latrines.

Ophthalmic Service.

19. The special service for treatment of acute purulent conjunctivitis continued throughout the year in Majdal, Gaza, Ramleh and Hebron subdistricts. This service dealt with 28,864 new cases, and 425,238 attendances amongst which 13,636 cases of acute purulent conjunctivitis were treated. There were 2,041 corneal ulcers.

The ophthalmic sections of the general clinics at Government hospitals and dispensaries dealt with 34,616 new cases of ophthalmic diseases, and 439,409 attendances, and in the school service there were 1,856,250 attendances. The ophthalmic situation in the schools was maintained very satisfactorily, but re-infection or exacerbation of trachoma, especially during school holidays were frequent.

Infant Welfare.

20. There was no expansion of this service in the absence of approved estimates, but the existing centres, and experimental village centres under midwife-nurses, did very good work and attendances materially increased due

no doubt, to the privation consequent on the strike and disturbances. Owing to the poor condition of mothers and babies at the end of the year, a special credit was authorised to allow of the issue of food and milk to mothers and the infants. The issue proved most beneficial.

The much more complete chain of centres amongst the Jewish population, financed by the Hadassah Medical Organization and other organizations, and receiving a grant from the Department, did valuable work. The low infant mortality amongst Jews reflects their good work.

School Hygiene.

21. The additional provision of medical officers and nurses for this expanding service was not approved. The work was carried on as satisfactorily as possible, and the ophthalmic treatment fully maintained in urban schools and to a lesser extent in rural schools with the assistance of teachers.

In the Jewish schools that did not come under the Government service, but for which a Government grant in aid was given, the service was well conducted. A very considerable sum is expended by the Hadassah Medical Organization on this service.

Improvement in Hospital Facilities.

22. There was no expansion of beds for general cases in Government hospitals. Credits were not forthcoming for the extension at Nablus, Safad and Jaffa. At Haifa and Jerusalem, the British Sections, only with difficulty, accommodated the wounded from amongst the British police and the considerable number of emergency Army, Air Force and Naval cases that had to be admitted.

In other hospital sections there was no great pressure, since wounded Palestinians would not seek admission from the fear of police investigation of the circumstances of their wounds.

Jaffa hospital was, however, embarrassed with large numbers of sick from internment camps.

Epidemic and Endemic Diseases

23. Epidemics of a serious nature did not occur.

Tuberculosis.

24. The scheme of hospital sanitorium and outpatient clinics included in the draft estimates, was not sanctioned, and little was done to relieve the existing serious situation. There were 438 cases reported, apart from the 4,592 cases found during the Survey, and 201 deaths. Palliative treatment only was possible except in a few instances.

Hookworm.

25. In the orange growing areas, hookworm continued to be prevalent, and in 1937 it is proposed to establish latrines in the orange groves themselves as well as in the villages. Mass treatment of villagers continued, but re-infection was frequent.

Infectious Hospitals.

26. The low incidence of enteric fever happily relieved the general hospital situation considerably.

The small infectious hospital accommodation was, however, fully occupied.

It was found necessary, owing to the disturbances, and particularly owing to the murder of two Jewish nurses of the Government Hospital, Jaffa, to open a temporary infectious hospital, for Jews only, at Bnei-Braq north of Tel-Aviv.

This hospital, in hired buildings, opened primarily for typhus cases, has since been established on a semi-permanent basis and three buildings adapted to accommodate 36 cases and the nursing staff.

Housing of Labour Classes.

27. A scheme for housing of labourers who live in shacks in and around Haifa was formulated and will, it is hoped, take effect in 1937. There are some 10,000 labourers and their families living in conditions of appalling filth in Haifa, and an equal number in Jaffa. Plots of Government land are to be allocated and water and sanitary services provided, and a small loan for construction granted against a small ground rent and contribution for services.

At Jaffa a similar form of scheme was drawn up by the Department, but not yet put into effect. Meanwhile, 100 families, evacuated from the Old City of Jaffa, have been provided with houses by the Government against a small annual rental.

Malaria.

28. The incidence of malaria was low in rural areas. In urban areas, where oiling and maintenance gangs constantly operate, the incidence continued to be negligible. The Department's organisation in both urban and rural areas continued unabated, and villagers and colonists notified for anti-malaria work under the Ordinance carried out their programmes under the Department's sub-inspectors and foremen. In certain districts, where disturbances were rife, it was found very difficult to get either Arab or Jewish labourers to work, but in general these difficulties were overcome.

The large reclamations of 1935, Wadi Kabbani, Birket Ramadan, Wadi Hawarith, Dameira on the coastal plain, and Ain Mudawara, Ain Tineh, Wadi Rubadieh, and Capernaum near Lake Tiberias, the work on the Musharifa Dam, and the extensive canalization of streams and wadis which were possible with credits available undoubtedly had the effect, as was foreseen, of reducing the incidence of malaria in these areas.

The recurrent work on Lake Tiberias shore and the filling and canalization in the vicinity was uniformly successful in combatting malaria. Between May 1st and September 26th only two anophelines were caught in the 19 mosquito-catching stations, established as a control, extending from Capernaum at the North to Samakh at the South end of the Lake.

The same success did not attend the work, not under the Department's immediate control, in the vicinity of the Palestine Electric Works at Jisr-el-Mejamie, where a high incidence of malaria occurred amongst the Trans-jordan Frontier Force and Army Units. This situation will be remedied in 1937.

Considerable incidence of malaria occurred amongst Army units guarding the Jerusalem water works at Ras-el-Ain where there is an uncontrollable spring area of several acres. A large credit will be necessary to improve the conditions in this area to which Jewish and Arab agricultural enterprise is extending.

Syphilis.

29. Considerable advance was made in the treatment of venereal disease at the principal centres of population. Special male clinics were established at Jaffa, Jerusalem, and Haifa, and women clinics held at Jaffa, Jerusalem, Haifa, Acre and Nablus by the two Lady Doctors.

A Palestinian medical officer was given a special course of training in England in 1935 and his duties were to develop on scientific lines the venereal treatment previously offered. At the same time the treatment of the endemic syphilis or "Firjal", was continued on better organised lines for the highly infected population in Hebron and sub-district. We aim at the eradication of this endemic syphilis by mass examination of whole villages in succession and treatment of all Wasserman positive cases.

Gynaecology.

30. Under the auspices of the two British Lady doctors appointed in 1935, gynaecological and ante-natal clinics were established at Jerusalem and Jaffa, and at Haifa, Acre and Nablus. These clinics proved most valuable and were besieged by women, especially Arabs, demanding treatment. They are now able to receive proper treatment in case of diseases and disorders for which they hesitated to attend male doctors. At the same time these clinics were instrumental in providing treatment for venereal disease, often previously neglected, amongst Arab women. I trust that the midwives who have been secretly and illegally carrying on so-called gynaecological practice of a most unsatisfactory kind will be gradually eliminated.

We require to extend the facilities for gynaecological, ante-natal and venereal treatment amongst women.

Municipal Sanitary Services

31. There was difficulty in maintaining the sanitary services in several municipalities in view of the strike which extended to Arab members of the Municipal Councils and their employees.

The Sanitary Surveyors in the towns of Jerusalem, Jaffa and Haifa, however, maintained the services very satisfactorily, not however, without experiencing opposition and great difficulty. There were no notable developments within municipal areas, but Consulting Engineers were engaged in working out :

(a) public water supply schemes for Tel Aviv, Jaffa, and making recommendations on Ramallah, Bethlehem and Beit Jala, and examining various possible sources for the water supply for Haifa,

(b) main drainage schemes for Tel Aviv, Jaffa and Haifa.

The water supply situation at Haifa was saved by the development by a private company of a source of excellent water from the shallow bores in the sand dunes north of Haifa.

The temporary drainage line at Haifa with pumped discharge outside the breakwater was working at full pressure. A serious flooding of the port with sewage would result if the pumping plant were to break down.

At Jaffa, the completion of the intercepting sewer at the reconstructed port area was represented as important.

In connection with the Jerusalem main drainage, a decision was arrived at to carry out, in addition to other sections awaiting completion, the sewer along the upper Bethlehem Road to drain the military barracks and vicinity where other forms of disposal were found impracticable.

There was not much progress in the approved sections of main drainage of Jerusalem.

The standard of household sanitation and drainage in the main towns was well maintained under the Buildings Permit By-laws of the Town Planning Committees. The latrines and bath installations in both Arab and Jewish quarters are of the most modern type.

SECTION II.

VITAL STATISTICS AND COMMUNICABLE DISEASES.

General.

32. Including the Bedu tribes as enumerated at the 1931 Census, the mid year (1936) population of Palestine has been estimated to be :

Moslems	*Jews*	*Christians*	*Others*	*Totals*
848,354	370,475	108,964	11,219	1,339,012

The following tables deal with the settled population only, that is excluding the Bedu tribes as recorded in 1931. The first table shows the method adapted in estimating the mid year population. Statistics of migration have been supplied by the Commissioner of Migration and Statistics but no allowance has been made for illegal and hence unrecorded immigration.

ESTIMATE OF POPULATION ON 30TH JUNE, 1936.

	Christians	Moslems	Jews	Others	Totals
Census of November, 1931	91,398	759,712	174,610	10,101	1,035,821
Deduct Nomadic Bedu Tribes		66,553			66,553
	91,398	693,159	174,610	10,101	969,268
Deduct His Majesty's Forces (as enumerated at 1931 census)	2,491	12	4		2,507
	88,907	693,147	174,606	10,101	966,761
Add Natural Increase period 1931 to 30-6-36 ...	9,361	86,861	24,338	*1,115*	121,675
	98,268	780,008	198,944	11,216	1,088,436
Add Increase due to Immigration period 1931 to 30-6-36...	8,205	1,781	171,527	3	181,516
Estimate as at 30th June, 1936	106,473	781,789	370,471	11,219	1,269,952

The recorded movement of population shows a net increase of Jewish population by 50,113 and of the non-Jewish by 25,310. The total increase of population was 6.31% of which 3.46% was due to immigration and 2.84% to natural increase. The corresponding percentages for last year were 5.3 and 2.2. respectively. The natural increase of Jewish population was 24 per 1000 and in the case of the non-Jewish 30 per 1000.

Births, Deaths and Infant Mortality in the settled Population.

33. The following table shows the estimated midyear population for the past 5 years and the absolute figures for births and deaths for these years along with the crude birth, death and infant mortality figures :

BIRTHS, DEATHS AND INFANT MORTALITY IN THE SETTLED POPULATION.

Year	Birth Rate per 1000 Living	Number of Births Registered	Estimated Population Midyear	Number of Deaths Registered	Death Rate per 1000 Living	Infant Deaths	Infant Mortality i. e. Children under 1 year of age per 1000 Births
1932	**44.14**	**43,538**	**986,329**	**21,958**	**22.26**	**6669**	**153.17**
1933	**44.38**	**46,089**	**1,038,331**	**20,866**	**20.09**	**6656**	**144.41**
1934	**41.59**	**45,942**	**1,104,605**	**24,136**	**21.85**	**7245**	**157.69**
1935	**45.16**	**53,940**	**1,194,529**	**22,249**	**18.62**	**7092**	**131.48**
1936	**44.88**	**56,993**	**1.269,952**	**20,465**	**16.11**	**6929**	**121.57**

CRUDE BIRTHS, DEATH AND INFANT MORTALITY RATES BY RELIGIOUS GROUPS.

		Christians	Moslems	Jews	Others	Whole Country
1932	Births	36.44	48.96	29.21	43.67	44.14
	Deaths	15.90	26.31	9.65	22.27	22.26
	Infant Mortality	141.38	164.44	85.77	167.04	153.17
1933	Births	36.02	49.83	29.22	47.00	44.38
	Deaths	13.95	24.07	9.26	17.56	20.09
	Infant Mortality	128.38	156.80	80.48	143.43	144.41
1934	Births	33.50	46.56	30.23	41.78	41.59
	Deaths	16.25	26.68	9.53	30.98	21.85
	Infant Mortality	152.62	175.34	77.95	202.67	157.69
1935	Births	35.68	52.53	30.79	42.86	45.16
	Deaths	14.02	23.45	8.57	21.02	18.62
	Infant Mortality	125.81	148.10	64.15	177.73	131.48
1936	Births	36.34	53.14	29.71	50.98	44.88
	Deaths	12.63	19.98	8.83	20.05	16.11
	Infant Mortality	113.72	136.17	68.85	129.37	121.57

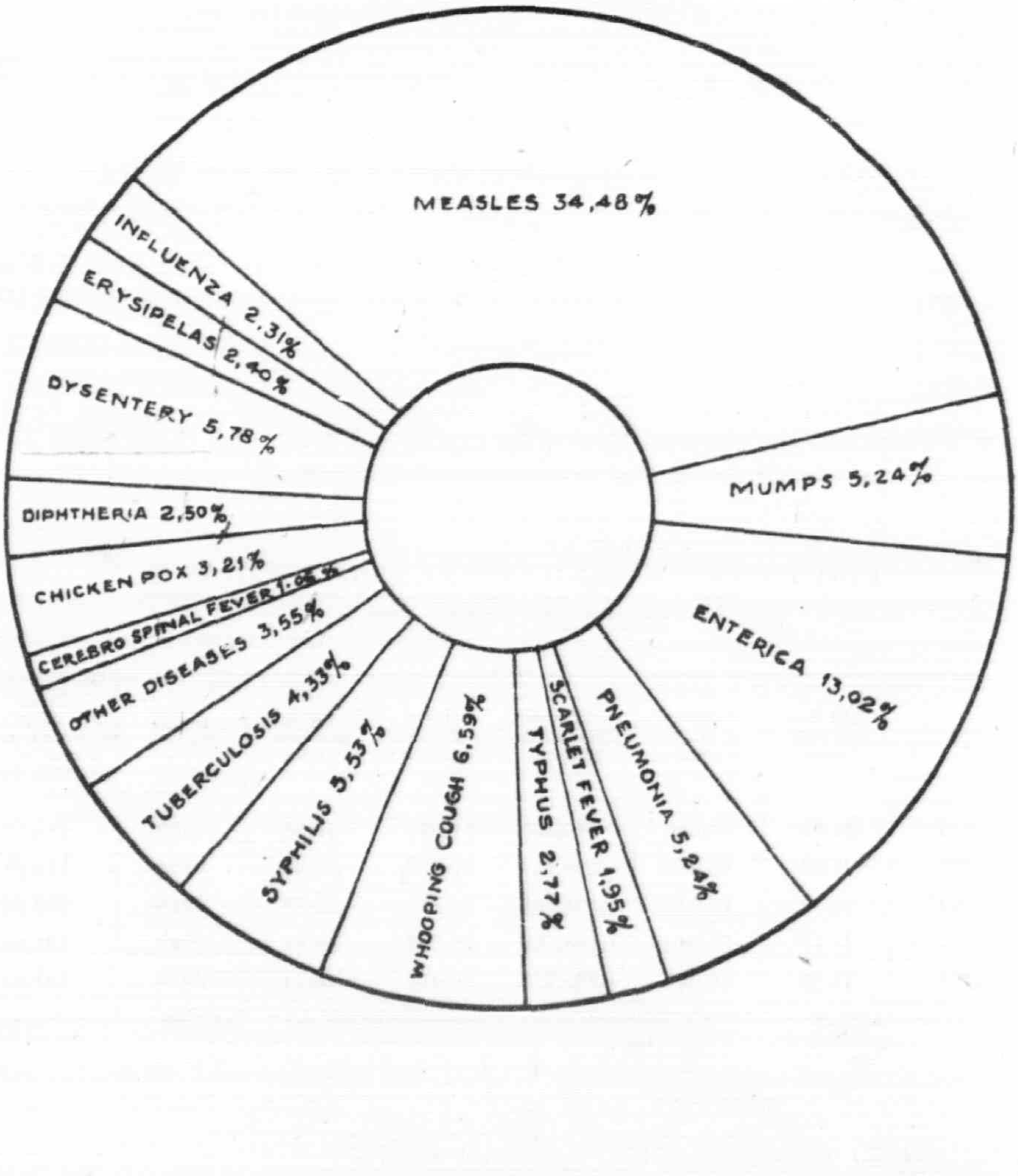
The Jewish birth rate shows a slight fall for the year while the non-Jewish rate has risen slightly. The death rate among Jews has risen very slightly from 8.5 to 8.8 while that for other sections of the community has fallen slightly. The infant mortality rate for the whole country has fallen from 131.4 to 121.5 although the rate for the Jewish section of the population has risen from 64.1 to 68.8. The general rate of 121.5 for this year is the lowest recorded.

Classification of causes of death.

34. As in past years only those deaths the cause of which has been certified by a medical practitioner have been classified in accordance with the International Nomenclature of Causes of Death. 8518 deaths were so classified and of these 22.1% were due to diseases of the respiratory system, 26.27 to diarrhoea and enteritis and 8.95 to infectious and parasitic diseases. Communicable diseases accounted for 1168 deaths of which 33% were due to pneumonia, 17.27 to tuberculosis, 17.1 to measles and 12.54 to enteric favers.

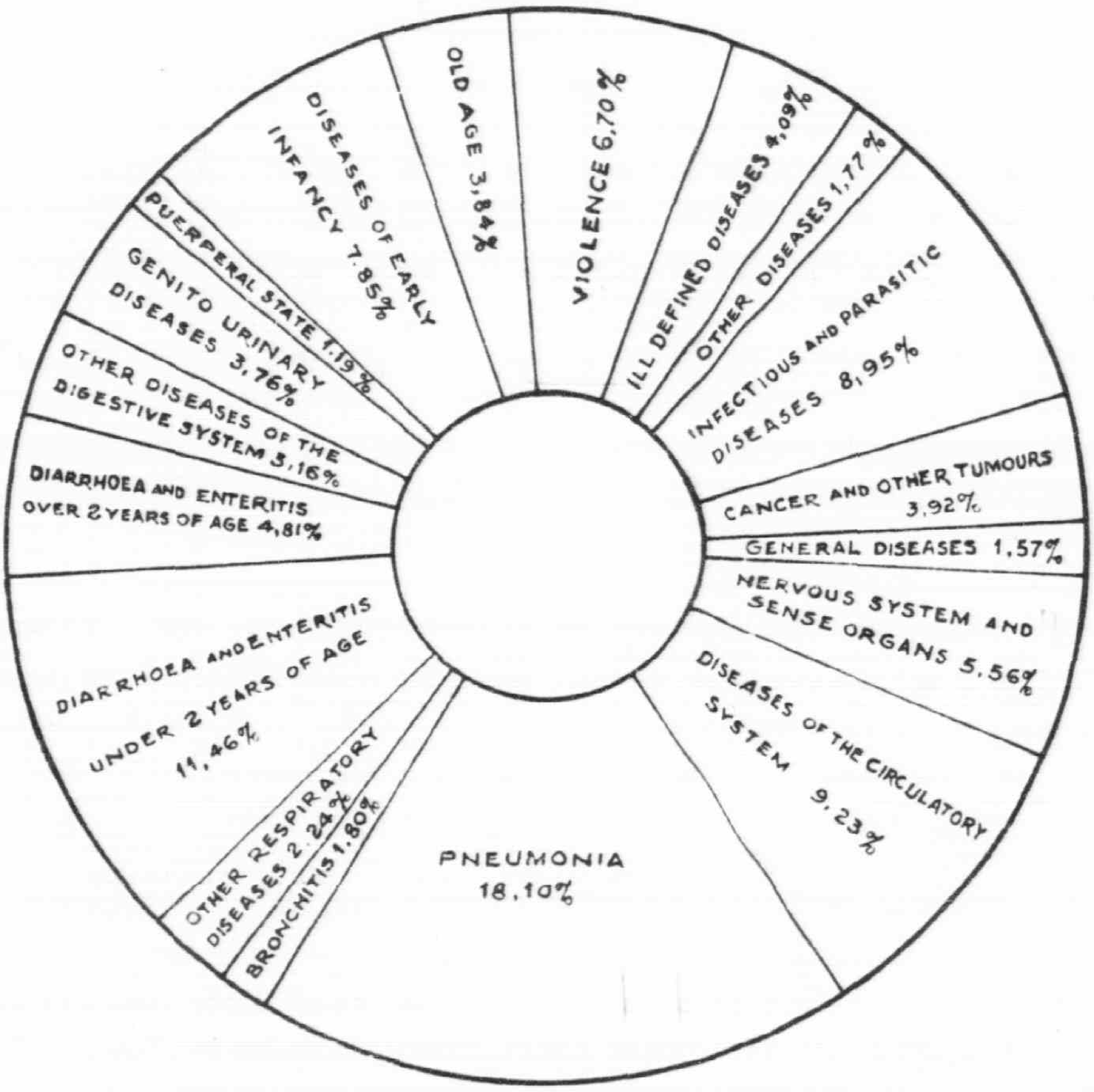
Proportion in Percentage of Cases of Epidemic, and Infectious Diseases (Malaria Excepted) Notified in Palestine in 1936.

Total Incidence — 10,120.



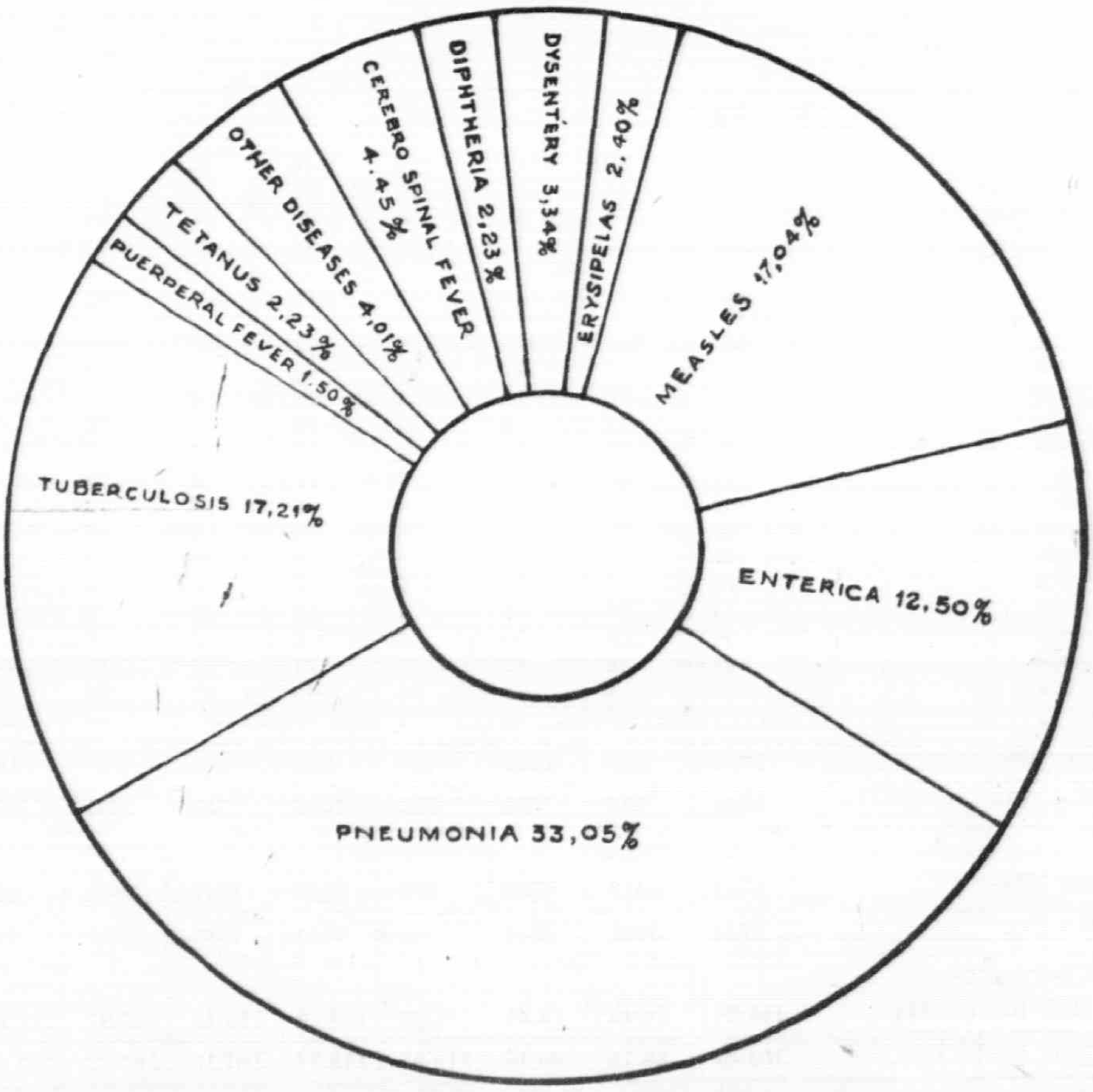
Proportions of Deaths from Epidemic, Endemic, Infectious, Systematic and other Diseases shown as Percentage of total Deaths in all Towns of Palestine, 1936.

Total Deaths — 8518.



Proportion in Percentage of Deaths from Epidemic, Endemic and Infectious Diseases (Malaria Excepted) Notified in Palestine in 1936.

Total Deaths — 1168.



BIRTHS, DEATHS AND INFANT MORTALITY 1936.

Town, Village or District.	Jerusalem	District	Ramallah	District	Bethlehem	District	Hebron	District	Beersheba
DEATHS.									
Under 1 month	114	82	2	53	26	14	49	88	12
1 to 3 months	53	83	5	63	21	18	35	91	4
3 to 6 months	81	85	6	53	21	19	52	57	6
6 to 12 months	135	113	8	68	22	30	67	107	5
Under 1 year	383	363	21	237	90	81	203	343	27
0 to 5 years	584	633	29	387	104	140	401	738	44
5 to 10 years	50	25	1	13	6	6	21	68	4
10 to 15 years	36	6	—	7	2	2	8	28	2
15 to 20 years	28	14	—	9	1	2	2	21	1
20 to 25 years	65	10	—	11	4	—	9	17	1
25 to 30 years	61	19	—	10	7	2	13	18	7
30 to 35 years	58	14	1	13	7	1	4	22	3
35 to 40 years	64	14	—	20	4	3	6	18	—
40 to 45 years	46	15	—	8	1	2	7	26	1
45 to 50 years	36	13	1	10	5	2	8	12	3
50 to 55 years	53	8	1	13	6	1	9	10	3
55 to 60 years	50	4	—	7	3	1	2	12	—
60 to 65 years	93	20	2	9	4	6	6	25	—
Over 65 years	495	86	14	91	41	37	80	152	12
Unknown	—	1	—	—	—	—	—	—	—
Total Deaths 1936	1719	882	49	608	195	205	576	1167	81
Total Deaths 1935.	1808	1079	52	715	168	248	576	1271	100
BIRTHS.									
Total Births 1936	3977	2482	178	1790	281	549	1263	2701	186
Total Births 1935	3973	2498	181	1710	253	552	1204	2836	174
INFANT MORTALITY.									
Rate per 1000 Births 1936	96.30	146.25	117.97	132.40	320.28	147.54	160.72	126.99	145.16
Rate per 1000 Births 1935	92.88	181.34	66.29	152.05	292.49	195.65	169.43	115.65	201.15

BIRTHS, DEATHS AND INFANT MORTALITY 1936.

Town, Village or District.	Jaffa	District	Tel-Aviv	Ramleh	District	Gaza	District	Majdal	District
DEATHS.									
Under 1 month	106	80	121	20	48	43	113	37	125
1 to 3 months	64	37	23	10	48	31	31	12	56
3 to 6 months	95	50	59	20	60	56	31	18	83
6 to 12 months	139	94	75	36	142	74	77	45	228
Under 1 year	404	261	278	86	298	204	252	112	492
0 to 5 years	613	445	398	127	571	386	450	151	749
5 to 10 years	40	19	19	6	20	23	26	3	26
10 to 15 years	23	10	12	1	14	6	13	2	11
15 to 20 years	21	15	9	5	12	2	15	2	11
20 to 25 years	34	33	43	4	11	13	7	4	7
25 to 30 years	71	42	38	7	13	5	12	1	15
30 to 35 years	44	23	47	4	18	17	14	1	17
35 to 40 years	48	25	33	3	17	5	14	3	23
40 to 45 years	33	20	29	3	9	16	13	1	10
45 to 50 years	31	14	24	2	10	5	8	2	18
50 to 55 years	47	20	45	4	13	11	9	1	12
55 to 60 years	21	29	55	5	6	3	7	4	21
60 to 65 years	43	38	87	9	21	21	16	—	10
Over 65 years	136	134	295	36	105	65	73	17	88
Unknown.	2	—	1	1	—	—	—	—	—
Total Deaths 1936	1207	867	1135	217	840	578	677	192	1018
Total Deaths 1935	1541	850	768	306	1006	755	891	165	950
BIRTHS.									
Total Births 1936	2771	3416	3736	656	2747	1312	2002	470	2632
Total Births 1935	2752	3087	3258	559	2751	1358	1822	414	2383
INFANT MORTALITY.									
Rate per 1000 Births 1936	145.79	76.40	74.41	131.09	108.48	155.48	125.87	238.30	186.93
Rate per 1000 Births 1935.	165.69	88.75	60.16	214.67	113.77	167.15	167.39	183.57	110.36

BIRTHS, DEATHS AND INFANT MORTALITY 1936.

Town, Village or District.	Haifa	District	Acre	District	Nazareth	District
DEATHS.						
Under 1 month	107	90	20	40	15	27
1 to 3 months	39	50	13	47	7	18
3 to 6 months	66	45	22	63	12	36
6 to 12 months	103	57	29	98	22	41
Under 1 year	315	242	84	248	56	122
0 to 5 years	512	393	119	415	90	202
5 to 10 years	36	15	4	29	7	11
10 to 15 years	25	12	5	13	6	14
15 to 20 years	35	16	1	19	5	6
20 to 25 years	60	21	3	16	7	10
25 to 30 years	47	32	1	13	9	6
30 to 35 years	55	20	3	17	7	7
35 to 40 years	50	15	5	9	10	11
40 to 45 years	29	7	1	10	7	7
45 to 50 years	32	12	8	16	2	9
50 to 55 years	27	7	3	8	4	4
55 to 60 years	46	19	14	16	12	5
60 to 65 years	41	16	8	11	17	12
Cver 65 years	164	84	32	82	44	32
Unknown.	1	2	—	—	—	—
Total Deaths 1936	1160	671	207	674	227	336
Total Deaths 1935	1191	773	179	760	221	405
BIRTHS.						
Total Births 1936	3676	2172	425	1981	553	1476
Total Births 1935	3333	1960	432	2083	497	1403
INFANT MORTALITY.						
Rate per 1000 Births 1936	85.69	111.41	197.64	125.19	101.25	82.65
Rate per 1000 Births 1935.	102.61	136.73	129.63	134.90	140.84	101.21

BIRTHS, DEATHS AND INFANT MORTALITY 1936.

Town, Village or District.	Nablus	District	Tulkarm	District	Tiberias	District	Safad	District	Jenin	District
DEATHS.										
Under 1 month	27	101	2	104	8	43	5	91	2	98
1 to 3 months	13	94	4	69	3	34	8	61	1	88
3 to 6 months	13	66	9	86	6	31	13	54	2	59
6 to 12 months	39	109	14	87	21	49	12	95	8	98
Under 1 year	92	370	29	346	38	157	38	301	13	343
0 to 5 years	241	684	48	561	56	276	67	455	29	618
5 to 10 years	29	29	1	18	6	13	11	27	2	19
10 to 15 years	9	26	2	10	4	11	4	12	2	9
15 to 20 years	11	12	2	9	7	6	6	12	—	12
20 to 25 years	13	27	—	29	7	16	11	7	—	25
25 to 30 years	28	32	5	22	4	11	11	32	—	19
30 to 35 years	14	35	3	19	13	9	17	17	2	14
35 to 40 years	22	19	4	15	9	24	14	11	2	17
40 to 45 years	11	35	1	19	7	10	3	23	—	16
45 to 50 years	7	17	—	13	1	10	2	14	1	14
50 to 55 years	18	12	1	12	3	12	2	6	2	11
55 to 60 years	12	15	5	11	6	6	5	8	1	10
60 to 65 years	19	31	2	16	9	15	1	30	1	13
Cver 65 years	57	127	12	76	30	63	32	65	7	67
Unknown.	—	—	—	—	1	2	—	—	—	4
Total Deaths 1936	491	1101	86	830	163	484	186	719	49	868
Total Deaths 1935	483	1279	70	913	167	600	211	780	58	910
BIRTHS.										
Total Births 1936	1064	2738	330	2707	475	1273	437	1762	139	2636
Total Births 1935	901	2648	273	2468	365	1239	415	1729	150	2279
INFANT MORTALITY.										
Rate per 1000 Births 1936	86.47	135.13	87.87	127.81	80.00	123.33	86.95	170.83	93.52	130.12
Rate per 1000 Births 1935	114.31	143.50	98.90	157.21	123.29	154.15	137.35	175.24	146.66	150.94

SUMMARY OF BIRTHS AND DEATHS — 1936.

	Total for Towns	Total for Districts excluding Beersheba
DEATHS.		
Under 1 month	716	1,197
1 to 3 months	346	888
3 to 6 months	557	878
6 to 12 months	854	1,493
Under 1 year	2,473	4,456
0 to 5 years	3,999	7,717
5 to 10 years	269	364
10 to 15 years	149	198
15 to 20 years	138	191
20 to 25 years	278	247
25 to 30 years	315	298
30 to 35 years	300	260
35 to 40 years	282	255
40 to 45 years	196	230
45 to 50 years	170	192
50 to 55 years	240	158
55 to 60 years	244	177
60 to 65 years	363	289
Over 65 years	1,569	1,362
Unknown	6	9
Total Deaths 1936	8,518	11,947
Total Deaths 1935	8,811	13,430
BIRTHS. Total Births 1936	21,929	35,064
Total Births 1935	20,492	33,448
INFANT MORTALITY Rate per 1000 Births — 1936	112.77	127.08
Rate per 1000 Births — 1935	121.56	137.56

Religions	Christians	Moslems	Jews	Others	Totals	Percentages
Population	106,473	781,789	370,471	11,219	1,269,952	
DEATHS.						
Under 1 month	110	1,490	292	21	1,913	—
1 to 3 months	84	1,065	72	13	1,234	—
3 to 6 months	92	1,164	159	20	1,435	—
6 to 12 months	154	1,938	235	20	2,347	—
Under 1 year	440	5,657	758	74	6,929	—
0 to 5 years	609	9,919	1,063	125	11,716	57.3
5 to 10 years	36	523	66	8	633	3.1
10 to 15 years	20	279	40	8	347	1.7
15 to 20 years	18	254	52	5	329	1.6
20 to 25 years	48	329	139	9	525	2.5
25 to 30 years	36	437	132	8	613	3.0
30 to 35 years	29	403	121	7	560	2.7
35 to 40 years	39	389	105	4	537	2.6
40 to 45 years	23	322	79	2	426	2.1
45 to 50 years	35	254	67	6	362	1.8
50 to 55 years	36	246	112	4	398	1.9
55 to 60 years	39	224	150	8	421	2.1
60 to 65 years	63	373	212	4	652	3.2
Over 65 years	314	1,658	932	27	2,931	144.3
Unknown	—	14	1	—	15	0.1
Total Deaths 1936	1,345	15,624	3,271	225	20,465	100.0
Deaths per 1000 — 1936	12.63	19.08	8.83	20.05	16.11	—
Deaths per 1000 — 1935	14.02	23.45	8.57	21.02	18.62	—
BIRTHS. Total Births 1936	3,869	41,543	11,009	572	56,993	—
Births per 1000 — 1936	36.34	53.14	29.71	50.98	44.88	—
Births per 1000 — 1935	35.68	52.53	30.79	42.86	45.16	—
INFANT MORTALITY Total Deaths under 1 year—1936	440	5,657	758	74	6,929	—
Rate per 1000 Births—1936	113.72	136.17	68.85	129.37	121.57	—
Rate per 1000 Births—1935	125.81	148.10	64.15	177.73	131.48	—

Epidemic Service.

Mobile Equipment.

35. No occasion arose during the year requiring the establishment of any temporary epidemic units.

Training of Junior Personnel.

36. During the spring 29 members of the department's junior staff attended a course of instruction in hygiene, sanitation and Departmental procedure. 16 passed the examination at the end of the course and were awarded certificates.

Disinfection.

37. The department maintains 28 mobile and 10 fixed steam disinfecting machines in various centres as well as 3 sulphur gas machines, one of which is portable.

The port disinfecting service at Haifa is now equipped with a Clayton Sulphur Gas Disinfecting Machine fitted on a dumb barge. A smaller portable but similar machine has also been provided for use on the quays.

During the year 3310 premises were disinfected as indicated in the following table :—

DISINFECTION SERVICE 1936.

	Method A*	Method B*	Articles or Bundles Disinfected
Jerusalem	7	361	1005
Ramallah	—	32	691
Bethlehem	—	48	375
Hebron	4	179	7360
Beersheba	—	21	5044
Jaffa	83	356	7273
Tel-Aviv	57	212	775
Ramleh	5	29	801
Gaza	—	157	2139
Majdal	—	12	1157
Haifa	79	628	33273
Acre	55	30	301
Nazareth	8	240	2930
Nablus	—	132	6385
Tulkarem	15	41	43054
Tiberias	69	165	4191
Safad	—	231	4652
Jenin	—	54	9664
TOTALS	382	2928	131070

*Disinfection of house of patient (and neighbouring houses where necessary).
Method "A" — For diseases originating in vermin.
Method "B" — For other diseases.

Infectious & Communicable Diseases.

38. 7129 cases of notifiable disease involving 883 deaths were reported, the corresponding figures for 1935 being 7840 and 1068.

The majority of diseases showed a fall in the number reported, this being most marked in the case of Enteric Fevers which fell from 2060 in 1935 to 1148 in the year under review.

Among those which showed an increase were influenza with 234 cases as compared with 58 in 1935, mumps with 530 cases as against 145 and typhus in which case the number rose to 280 from 55.

(a) ACUTE POLIOMYELITIS.

Cases of this disease have continued to occur sporadically in small numbers. 21 cases with 5 deaths were notified compared with 19 cases and 3 deaths in 1935.

(b) CEREBRO-SPINAL MENINGITIS.

The incidence of this disease was less than last year, there having been 107 cases with 52 deaths compared with 169 cases and 75 deaths in 1935. The principal areas affected were the large towns and their surroundings.

(c) ANTHRAX.

The number of cases of this disease was practically the same as last year. There were 31 cases with 4 deaths.

(d) DIPHTHERIA.

The number of cases of this disease fell from 335 in 1935 to 257. There were 26 deaths. The incidence was highest in the autumn and winter months and the disease was more prevalent in the towns than in rural areas.

(e) PNEUMONIA.

There were 531 cases with 386 deaths. Notification of this disease is however incomplete.

(f) TUBERCULOSIS.

See Section III.

(g) MEASLES.

The incidence of this disease showed no variation from last year but there was a reduced case fatality rate. There were 3489 cases with 199 deaths. The sub-districts of Nablus, Jenin, Bethlehem and Hebron were those most affected.

(h) SCARLET FEVER.

There were 197 cases with no deaths.

(i) SMALLPOX.

There was no smallpox.

(j) TYPHOID.

There were 1148 cases with 143 deaths compared with 2060 cases with 204 deaths in 1935.

The number of cases and deaths in the principal towns were :

	Cases	*Deaths*
Haifa	145	20
Jaffa	183	28
Jerusalem	133	15
Tel-Aviv	126	3

The table on page 24 shows the age distribution of the total cases and deaths.

The fall in the incidence of the disease has been very notable and it is very difficult to attribute it to any particular factor or group of factors. The disturbances which occurred last year undoubtedly restricted movements of population but the decline has been equally notable in areas where this restriction was hardly felt. It cannot be said that climatically the year was any less favourable to the spread of the disease nor can it be argued that there was such a sudden improvement in the sanitary circumstances of the population as would account for the fall. A shortage of green vegetables may have been a factor but this is not borne out by the trend of the curve which early in 1937 was still falling. Some time must elapse before any opinion of any value can be given and the trend of the disease will be watched with interest.

(k) PARATYPHOID.

There were 170 cases with 3 deaths compared with 200 cases and 4 deaths in 1935.

(l) DYSENTERY.

Notification of this disease is still incomplete. 585 cases with 39 deaths were reported; the corresponding figures for last year being 465 and 56.

(m) PUERPERAL FEVER.

There were 45 cases involving 18 deaths, while last year the figures were 54 and 29. Notification in this case is also incomplete.

(n) TYPHUS FEVER.

The number of cases of this disease notified have risen from 55 with 3 deaths last year to 280 with 2 deaths this year. Investigations carried out during the year have confirmed the view that this disease is not epidemic typhus but murine typhus. This is also borne out by the mildness of the disease and very low case mortality rate. A very large number of the cases bore little resemblance to typhus fever and were diagnosed as such on laboratory findings. The increase in the incidence can be largely attributed to housing conditions. The large immigration of the past few years has lead to overcrowding in many areas and consequently the adoption of temporary dwellings of a type which have brought the human population into much closer contact with the rodent one. Extensive measures of disinfection were taken in all cases as well as measures to banish rats from habitations.

(o) RELAPSING FEVER.

There were 23 cases with no deaths compared with 34 also without mortality in 1935.

(p) ANKYLOSTOMIASIS.

See Section III.

(q) BLACKWATER FEVER.

There was one non-fatal case in Haifa sub-district during the year.

(r) HYDROPHOBIA.

There were 3 deaths from this cause during the year.

(s) LEPROSY.

7 new cases were reported. 4 known cases of leprosy died during the year.

Vaccinations.

Vaccinations against Small Pox.

39. The following table shows the vaccinations performed during the year. It has been the constant endeavour of the Department to keep the percentage of population vaccinated at the highest possible level. Vaccinations in villages fell off somewhat during the summer due to the disturbed state of the country but these were being overtaken rapidly towards the end of the year.

VACCINATIONS 1936.

	Results of Vaccination	Towns	Villages	Persons Entering Palestine		Totals
				Haifa Port	Jaffa Port	
Primary Vaccinations.	Successful	13,691	32,578	—	—	46,269
	Unsuccessful	628	1,067	—	—	1,695
	Not Observed	1,575	1,156	—	—	2,731
Re-Vaccinations.	Successful	3,280	1,485	5,131	2,077	11,973
	Unsuccessful	968	434	3,645	634	5,681
	Not Observed	185	48	9,378	—	9,611
TOTALS.		20,327	36,768	18,154	2,711	77,960

CASE AND DEATH INCIDENCE OF TYPHOID BY RELIGION, SEX AND AGE GROUP — 1936.

Age Groups	Christians						Moslems						Jews						Totals					
	Males		Females		Totals		Males		Females		Totals		Males		Females		Totals		Males		Females		Totals	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
0 to 5 years	4	—	2	—	6	—	42	9	15	4	57	13	16	2	7	—	23	2	62	11	24	4	86	15
5 to 10 years	16	2	19	1	35	3	*76	15	*67	13	*143	28	34	1	22	—	56	1	126	18	108	14	234	32
10 to 15 years	18	4	10	1	28	5	73	13	*63	7	*136	20	16	3	21	1	37	4	107	20	94	9	201	29
15 to 20 years	11	—	8	—	19	—	*41	*6	31	4	*72	*10	24	2	10	—	34	2	76	8	49	4	125	12
20 to 25 years	7	—	6	—	13	—	34	2	**13	2	**47	4	69	4	41	1	110	5	110	6	60	3	170	9
25 to 30 years	5	—	3	1	8	1	41	3	22	4	63	7	39	5	38	2	77	7	85	8	63	7	148	15
30 to 35 years	2	—	2	—	4	—	19	3	11	3	30	6	17	2	13	—	30	2	38	5	26	3	64	8
35 to 40 years	1	1	3	1	4	2	13	2	11	1	24	3	8	—	9	1	17	1	22	3	23	3	45	6
40 to 45 years	2	—	—	—	2	—	2	1	10	1	12	2	5	—	5	—	10	—	9	1	15	1	24	2
45 to 50 years	1	—	—	—	1	—	2	—	3	2	5	2	3	1	4	—	7	1	6	1	7	2	13	3
50 to 55 years	1	—	—	—	1	—	1	—	4	1	5	1	3	1	3	—	6	1	5	1	7	1	12	2
55 to 60 years	—	—	—	—	—	—	5	1	4	3	9	4	1	—	1	—	2	—	6	1	5	3	11	4
60 to 65 years	—	—	—	—	—	—	—	—	1	—	1	—	2	1	3	1	5	2	2	1	4	1	6	2
65 to 70 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	—	—	1	1	1	1
70 to 75 years	—	—	—	—	—	—	2	1	1	—	3	1	2	—	1	—	3	—	4	1	2	—	6	1
75 to 80 years	—	—	—	—	—	—	1	1	—	—	1	1	1	1	—	—	1	1	2	2	—	—	2	2
Totals	68	7	53	4	121	11	352	57	256	45	608	102	240	23	179	7	419	30	660	87	488	56	1148	143

* Includes 1 Druz in each.

** Includes 1 Bahai.

CASE AND DEATH INCIDENCE OF INFECTIOUS DISEASES BY MONTHS FOR THE YEAR — 1936.

	January		February		March		April		May		June		July		August		September		October		November		December		TOTALS	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Acute Poliomyelitis	4	—	1	—	3	1	—	—	2	1	3	2	3	1	—	—	—	—	1	—	2	—	2	—	21	5
Anthrax	4	—	1	—	—	—	2	—	2	—	3	—	6	1	2	1	1	—	1	—	5	1	4	1	31	4
Cerebro-Spinal Meningitis	23	10	23	10	19	10	13	9	6	5	3	1	5	4	—	—	4	—	—	—	2	1	9	2	107	52
Chicken Pox	25	—	27	—	49	—	36	—	65	—	46	—	17	—	15	1	5	—	16	—	20	—	4	—	325	1
Diphtheria	28	4	18	3	17	4	10	2	8	1	13	2	9	—	17	1	13	1	46	4	36	1	42	3	257	26
Dysentery	16	1	12	—	15	—	23	—	40	8	25	5	47	6	93	8	108	—	75	1	97	5	34	5	585	39
Encephalitis Lethargica	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	2	1
Erysipelas	25	2	33	3	23	3	20	4	20	4	20	3	20	5	15	—	7	—	21	1	21	1	18	2	243	28
Hydrophobia	1	1	—	—	1	1	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	3	3
Influenza	4	1	4	1	—	—	2	—	212	—	2	—	—	—	—	—	—	—	1	—	1	1	8	—	234	3
Measles	385	26	391	21	575	40	297	17	345	12	275	12	147	9	67	4	217	14	168	22	211	4	411	18	3489	199
Mumps	59	—	107	—	179	—	29	—	20	—	31	—	14	—	8	—	11	—	4	—	10	—	58	—	530	—
Paratyphoid	8	—	7	—	11	1	4	—	7	1	11	—	4	—	10	—	40	—	30	—	15	1	23	—	170	3
Pneumonia	54	41	45	37	56	40	51	30	43	34	36	28	39	31	29	22	29	22	31	23	53	35	65	43	531	386
Puerperal Fever	9	4	7	2	1	—	5	1	1	—	4	2	4	2	3	1	1	—	3	2	7	4	—	—	45	18
Relapsing Fever	3	—	1	—	4	—	3	—	—	—	—	—	1	—	6	—	3	—	—	—	1	—	1	—	23	—
Scarlet Fever	19	—	15	—	17	—	14	—	42	—	34	—	15	—	10	—	5	—	5	—	14	—	7	—	197	—
Schistosomiasis	1	—	—	—	2	—	—	—	—	—	2	—	—	—	—	—	—	—	12	—	46	—	6	—	69	—
Typhoid	109	10	79	13	59	5	53	13	88	8	89	16	78	9	116	12	147	16	118	19	123	16	89	6	1148	143
Typhus	3	—	2	—	2	—	4	—	12	—	34	—	29	—	34	1	63	—	43	—	33	1	21	—	280	2
Undulant Fever	1	—	1	—	—	—	—	—	1	—	—	—	1	—	—	—	2	—	—	—	—	—	1	—	7	—
Whooping Cough	73	—	15	—	55	2	32	—	56	1	69	—	123	5	69	2	51	—	82	—	35	1	7	—	667	11
Ankylostomiasis	—	—	—	—	2	—	—	—	1	—	1	—	1	—	2	—	2	—	2	1	1	—	—	—	12	1
Blackwater Fever	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Gonorrhoea	8	—	17	—	11	—	9	—	8	—	3	—	1	—	2	—	2	—	5	—	8	—	7	—	81	—
Kala-Azar	1	1	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	2	2
Leishmaniasis	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Leprosy	1	—	—	1	2	1	—	1	—	—	—	—	—	—	1	1	1	—	—	—	—	—	2	—	7	4
Malaria	50	—	26	—	30	—	27	—	25	—	43	—	63	1	102	1	118	2	124	—	144	—	88	—	840	4
Rheumatic Fever	2	—	4	—	5	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13	—
Syphilis	69	3	67	1	84	—	22	1	25	—	28	—	39	—	50	1	39	—	34	—	58	—	45	—	560	6
Tetanus	4	2	4	3	4	3	3	2	1	1	3	1	3	1	2	2	2	2	7	3	5	4	3	2	41	26
Tuberculosis	46	13	62	17	65	18	47	12	24	21	31	19	38	15	30	14	23	8	26	15	30	14	16	35	438	201
TOTALS	1037	120	969	112	1292	129	707	92	1055	97	810	92	707	90	684	73	894	65	856	91	978	90	971	117	10960	1168

CASE AND DEATH INCIDENCE OF INFECTIOUS

	Jerusalem Town		Jerusalem District		Ramallah and District		Bethlehem and District		Hebron and District		Beersheba and District		Jaffa Town		Jaffa District		Tel-Aviv		Ramleh and District	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Acute Poliomyelitis	2	2	—	—	—	—	2	—	—	—	—	—	—	—	6	—	10	3	—	—
Anthrax	5	—	5	2	—	—	1	—	—	—	1	—	5	1	—	—	1	—	1	—
Cerebro Spinal Meningitis	14	8	3	2	—	—	2	1	—	—	—	—	10	6	2	2	4	2	—	—
Chicken Pox	10	—	—	—	4	—	7	—	12	—	4	—	24	—	44	—	20	—	28	—
Diphtheria	15	6	1	1	—	—	—	—	1	1	2	—	19	4	35	3	80	3	—	—
Dysentery	43	5	1	—	—	—	—	—	1	—	—	—	47	4	177	7	207	19	8	—
Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—
Erysipelas	27	8	4	1	—	—	5	—	—	—	5	—	31	3	19	1	24	2	1	1
Hydrophobia	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—
Influenza	124	—	1	1	10	—	—	—	—	—	2	—	1	1	—	—	—	—	—	—
Measles	34	3	149	12	190	1	256	14	687	74	—	—	35	2	12	—	189	6	71	—
Mumps	11	—	—	—	6	—	13	—	56	—	7	—	5	—	50	—	26	—	1	—
Paratyphoid	8	—	—	—	1	—	—	—	—	—	—	—	19	1	39	1	57	—	—	—
Pneumonia	133	122	4	4	—	—	16	7	7	6	16	8	116	106	8	7	37	36	1	1
Puerperal Fever	6	1	2	1	—	—	1	—	4	2	2	1	5	4	1	1	2	1	—	—
Relapsing Fever	6	—	—	—	—	—	—	—	2	—	—	—	2	—	1	—	—	—	—	—
Scarlet Fever	65	—	—	—	—	—	—	—	1	—	—	—	7	—	39	—	47	—	1	—
Schistosomiasis	2	—	—	—	—	—	—	—	—	—	—	—	8	—	24	—	32	—	—	—
Typhoid	133	15	47	3	—	—	7	1	63	10	14	1	183	28	92	6	126	3	—	—
Typhus	—	—	1	—	—	—	—	—	—	—	—	—	14	—	53	—	63	2	—	—
Undulant Fever	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	2	—	—	—
Whooping Cough	15	—	—	—	—	—	6	—	2	—	—	—	11	1	44	—	43	8	12	—
Ankylostomiasis	2	—	—	—	—	—	—	—	—	—	—	—	1	—	7	1	1	—	—	—
Blackwater Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gonorrhoea	4	—	—	—	—	—	—	—	2	—	2	—	4	—	—	—	—	—	—	—
Kala-Azar	1	1	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—
Leishmaniasis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Leprosy	3	3	—	—	—	—	—	—	1	—	—	—	1	—	1	—	—	—	—	—
Malaria	32	—	8	—	15	—	53	—	23	—	87	—	15	2	96	—	19	—	128	1
Rheumatic Fever	2	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Syphilis	189	3	—	—	1	—	1	—	270	—	5	—	6	1	1	—	—	—	—	—
Tetanus	3	3	2	1	—	—	—	—	—	—	—	—	10	8	4	2	—	—	—	—
Tuberculosis	79	37	20	3	7	3	8	6	11	4	25	11	83	49	7	3	14	10	8	3
TOTALS	969	217	249	31	234	4	378	29	1143	97	172	21	665	224	763	34	1004	95	261	6

DISEASES BY LOCATION FOR THE YEAR 1936.

Gaza and District		Majdal and District		Haifa Town		Haifa District		Acre and District		Nazareth and District		Nablus and District		Tulkarem and District		Tiberias and District		Safad and District		Jenin and District		TOTALS	
Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21	5
—	—	—	—	4	—	2	—	—	—	—	—	6	1	—	—	—	—	—	—	—	—	31	4
4	2	—	—	53	21	3	2	2	2	4	1	6	3	—	—	—	—	—	—	—	—	107	52
7	—	17	—	21	—	18	—	4	—	13	1	10	—	14	—	31	—	32	—	5	—	325	1
1	1	8	—	60	4	20	—	2	—	2	—	4	2	—	—	7	1	—	—	—	—	257	26
—	—	—	—	49	—	28	—	8	—	3	2	—	—	—	—	12	1	1	1	—	—	585	39
—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	2	1
9	1	—	—	52	3	12	1	—	—	—	—	43	6	—	—	3	—	6	1	2	—	243	28
—	—	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	3
—	—	—	—	2	1	—	—	88	—	—	—	2	—	—	—	—	—	4	—	—	—	234	3
3	—	98	—	20	1	4	—	8	1	—	—	656	27	84	9	155	6	78	—	760	43	3489	199
—	—	4	—	32	—	1	—	1	—	35	—	22	—	—	—	—	—	9	—	251	—	530	—
1	—	—	—	17	—	9	1	—	—	3	—	8	—	1	—	2	—	5	—	—	—	170	3
30	14	—	—	44	26	4	3	1	—	17	15	36	10	—	—	13	8	48	13	—	—	531	386
—	—	—	—	6	1	2	—	—	—	—	—	8	1	—	—	3	3	3	2	—	—	45	18
—	—	—	—	3	—	—	—	—	—	—	—	9	—	—	—	—	—	—	—	—	—	23	—
—	—	—	—	17	—	10	—	—	—	—	—	1	—	6	—	3	—	—	—	—	—	197	—
1	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	69	—
43	8	—	—	145	20	61	9	8	1	16	1	143	32	—	—	9	1	57	4	1	—	1148	143
—	—	—	—	119	—	14	—	—	—	1	—	—	—	1	—	—	—	14	—	—	—	280	2
—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	—
40	—	20	—	35	—	39	—	—	—	22	—	135	2	156	—	40	—	34	—	13	—	667	11
—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	12	1
—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
—	—	—	—	69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	81	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2
—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	7	4
11	—	—	—	18	—	20	—	—	—	—	—	84	1	111	—	73	—	47	—	—	—	840	4
—	—	—	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13	—
2	—	—	—	58	2	—	—	9	—	—	—	—	—	4	—	14	—	—	—	—	—	560	6
3	1	2	2	3	3	3	3	—	—	2	2	8	1	—	—	—	—	—	—	1	—	41	26
3	—	27	4	42	17	14	5	27	2	18	5	27	3	11	1	3	2	2	14	2	19	438	201
158	27	177	7	883	100	266	24	160	6	136	27	1209	89	389	10	368	23	341	35	1035	62	10960	1168

TUBERCULOSIS CLASSIFICATION — 1936.

Towns

	Respiratory System		Meninges and Central Nervous System, generally		Intestines and Peritoneum		Vertebral Column		Joints		Skin and Sub-Cutaneous Cellular Tissue		Bones (Vertebral Column excluded).		Lymphatic System (mesenteric & retroperitoneal glands excepted).		Genito-Urinary System.		Organs other than the above		Disseminated Acute		Disseminated Chronic		Totals	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Jerusalem	73	29	2	2	4	4	1	1	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	81	37
Ramallah	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Bethlehem	3	3	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	4
Hebron	10	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	4
Beersheba	5	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	4
Jaffa	73	41	1	1	5	5	—	—	—	—	—	—	4	2	—	—	—	—	—	—	—	—	—	—	83	49
Tel-Aviv	14	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	10
Ramleh	1	2	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	3
Gaza	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—
Majdal	8	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	2
Haifa	43	5	—	—	—	—	—	—	—	—	—	—	4	—	4	—	—	—	—	—	1	1	—	—	52	6
Acre	10	—	1	1	1	1	—	—	—	—	2	—	—	—	3	—	—	—	—	—	—	—	—	—	17	2
Nazareth	8	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	5
Nablus	5	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	2	—	—	—	—	—	8	—
Tulkarem	3	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	4	—
Tiberias	20	1	—	—	1	1	—	—	4	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	26	2
Safad	70	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	70	12
Jenin	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	1
Totals Towns	351	118	4	4	12	12	1	1	5	1	2	—	11	2	7	1	1	1	2	—	1	1	—	—	397	141
Totals Villages	327	35	1	2	7	3	5	—	8	—	4	—	10	4	24	—	—	—	3	—	—	—	—	—	389	44
Grand Totals	678	153	5	6	19	15	6	1	13	1	6	—	21	6	31	1	1	1	5	—	1	1	—	—	786	185

Villages

	Respiratory System		Meninges and Central Nervous System, generally		Intestines and Peritoneum		Vertebral Column		Joints		Skin and Sub-Cutaneous Cellular Tissue		Bones (Vertebral Column excluded).		Lymphatic System (mesenteric & retroperitoneal glands excepted)		Genito-Urinary System		Organs other than the above		Disseminated Acute		Disseminated Chronic		Totals	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Jerusalem	18	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18	3
Ramallah	6	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	3
Bethlehem	2	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	2
Hebron	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Beersheba	16	6	—	1	2	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	20	7
Jaffa	6	2	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	3
Tel-Aviv	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ramleh	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	—
Gaza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Majdal	17	2	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	19	2
Haifa	11	—	—	—	—	—	2	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	14	—
Acre	6	—	—	—	1	—	—	—	1	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	10	—
Nazareth	9	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	—
Nablus	9	3	—	—	—	—	—	—	3	—	1	—	3	—	3	—	—	—	—	—	—	—	—	—	19	3
Tulkarem	3	—	—	—	—	—	—	—	1	—	—	—	3	1	—	—	—	—	—	—	—	—	—	—	7	1
Tiberias	131	—	—	—	2	—	2	—	3	—	1	—	2	—	18	—	—	—	3	—	—	—	—	—	162	—
Safad	85	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	85	2
Jenin	1	14	—	—	—	1	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	1	18
	327	35	1	2	7	3	5	—	8	—	4	—	10	4	24	—	—	—	3	—	—	—	—	—	389	44

SECTION III.

ENDEMIC DISEASES.

Malaria. General Observations.

40. The rainfall of the winter 1935-36 was lower than that of the previous winter; the average for 65 recording stations throughout the country was 343 mms. compared with 528 mms. for 59 stations in 1934-35. A feature which has a favourable influence from the point of view of malaria prevention was the failure of the "latter rains" (those occurring in late spring) which facilitates the drying up of temporary water collections and swamps before the anopheles breeding season commences and reduces the amount of drainage work or control by chemical methods required. An unfavourable feature of the year, as a whole, was the disturbed political situation which rendered the regular supervision of mosquito breeding places a matter of danger and difficulty to the staff of the department both in town and country. It is a pleasant duty to record the loyalty which the staff of the department and temporary employees displayed in carrying out the important service which is for the general benefit of the community. It was necessary, however, in several areas both urban and rural to redistribute staff in accordance with the political complexion of the locality in which control was required. In spite of these difficulties it is satisfactory to record that the year passed without serious epidemic recrudescence in any locality.

Comparative Statistics of the Incidence of Malaria.

41. The comparative statistics which it has been customary to give appear in the tables which follow. There was a slight increase in the absolute number of cases of malaria treated at public dispensaries, but taking into consideration the increased total number of patients attending for all conditions, a natural result of the larger population, the percentage of malaria cases found in patients was lower, namely, 0.53% compared with 0.74% in 1935.

PERCENTAGE OF MALARIA CASES AMONG DISPENSARY PATIENTS, 1931—1936.

Year	Total number of Dispensary Patients	Number of Patients treated for Malaria	Percentage of Malaria Patients
1931	458,941	8,147	1.77
1932	495,583	2,984	0.60
1933	528,186	3,330	0.63
1934	641,597	5,318	0.83
1935	747,410	5,552	0.74
1936	765,216	4,081	0.53

Spleen Rates.

42. The examination of school children for presence of splenic enlargement was as usual carried out in October and November. In 24,012 children attending schools in towns the spleen rate was 1.72% compared with 1.70% in 26,278 children in 1935.

In 42,029 children attending schools in 515 villages a rate of 6.68% was found compared with 7.73% in 45,765 children in 1935. In towns, the spleen rates found are not significant, except in Beisan where the rate is 50%. In rural districts, the highest rates were found in the sub-districts of Tiberias 39%, Safad 26% and Jenin 10%. In all three localities, however, the rates show a slight decrease over those in 1935.

SPLEEN RATE TABLE FOR 5 YEARS.

Year	Number of Towns or Villages	Number of Children Examined	Number of Children with Enlarged Spleens. Degree of Enlargement			Spleen Rate
			Slight	Moderate	Great	
				TOWN SCHOOL CHILDREN		
1932	19	15285	97	14	3	0.74%
1933	19	19933	218	38	7	1.32%
1934	19	22666	331	34	7	1.64%
1934	19	26278	249	151	48	1.70%
1936	19	24012	298	114	13	1.77%
				VILLAGE CHILDREN		
1932	452	33088	1298	338	85	5.2 %
1933	510	48853	1225	365	107	4.3 %
1934	549	41587	1738	435	98	5.46%
1935	583	45765	2274	906	193	7.37%
1936	515	42039	1644	381	89	6.68%

The combined spleen rates in the various administrative districts for the past five years is shown below :—

Medical District	1932	1933	1934	1935	1936
Jerusalem	0.4	0.6	0.56	0.63	0.68
Jaffa	0.3	6.1	0.37	0.45	0.34
Haifa	2.4	1.4	4.68	4.56	1.38
Samaria & Galilee	10.4	12.8	11.71	11.15	14.36

A practical demonstration of the satisfactory reduction of endemic malaria which has been achieved by the constant anti-larval measures of previous years was afforded during the military activities which were carried on throughout the whole of the malarious season, April to November. Military patrols operated on roads and railways by day and night, picquets and guards were stationed in many parts of the country and frequent operations involving the movement of considerable bodies of men for several days on end over large parts of the country were executed. The troops for the most part were young soldiers susceptible to malaria infection and inexperienced in methods of personal prophylaxis. The total number of cases of malaria which occurred in the forces the total strength of which eventually reached a maximum of 15,000 was 117 primary cases and 22 relapses. Of the primary cases, 55 or practically half the total number were contracted in two localities where no anti-larval measures have been carried out by the Department. This indicated that the routine anti-larval measures of the Department rather than procedures of personal or therapeutic prophylaxis were mainly responsible for the protection of the troops from malaria infection in other parts of the country.

Routine Anti-malarial Measures.

43. The steady growth of the towns of Palestine involves automatic expansion of the routine anti-larval measures in urban areas. The following is a summary of work in these areas. There were almost 200,000 possible breeding places on the registers for routine inspection and oiling where necessary; over three and a half million inspections were made, and nearly 400,000 oilings performed. Anopheles breeding was found on thirty-five occasions and culex breeding on 22,000 occasions for the most part in the septic tanks of house drainage systems. Fourteen thousand possible breeding places were rendered mosquito proof and two hundred pumps fitted. Prosecutions under the Antimalarial Ordinance had to be resorted to in 200 cases. In the course of village cistern control nearly 400,000 oilings were required. Mosquito breeding was found on 14,500 occasions; 1,500 places were made permanently mosquito proof. Prosecution was required in 348 cases.

Rural antimalarial work in wadies and streams was similar to that of previous years, but less in total extent on account of the smaller rainfall of the winter. The permanent staff was supplemented by foremen supervisors employed on a temporary basis to maintain effective anti-larval control on canalization work carried out in spring and secure proper maintenance of these drainage works. The Department provided at its cost 19,000 days labour of this nature by temporary staff. For clearance and canalization of streams and wadies, Local Councils supplied labour to the extent of 1,378 working days, and private persons, land owners, villagers and settlers, a total of 45,037 working days. During the acute stage of the political disturbances, the District Superintendent of Police kindly furnished guards for antimalarial labour gangs in the Northern part of Jaffa sub-district. A breakdown of the measures for the prevention of malaria in this area was thereby narrowly averted.

Antimalarial Drainage Schemes.

44. Owing to the financial situation, no new works were undertaken and activities were restricted to the improvement and completion of existing schemes.

Birket Ramadan Drainage Scheme.—Enlargement and improvement of the main drainage canals and filling of some 65,000 m^3 of low lying areas in the marsh were completed during the year. The work was impeded by the difficulty of obtaining labour during the disturbances. Owing to the proximity of new military barracks situated about 3 kilometres north of the outfall of the River Falik, it was found necessary to extend the drainage scheme to the sea and regulate the Wadi Falik bed by straightening the old river course with concrete walls and the filling of the old river bed. This extension work is nearing completion. The estimated cost is £P.1,500. In spite of the very heavy floods in this area where the flood water overflowed a section of the lower end of the main channel, no damage was done and the run-off was so good that the water subsided and dried the flooded parts of the marsh in a few days.

Rubin Marsh Drainage Scheme.—The drainage of the Rubin marsh was completed in 1930, and during the last six years the main drains had greatly deteriorated through lack of proper maintenance by the owners, and it was feared the marsh would return to its original state. In fact in some of the low lying areas marshy conditions were reforming. As effective anti-malaria control was becoming impossible, authority was obtained by Special Warrant to spend £P.500 on regrading, deepening and sloping all the drains and the building of culverts and cattle crossings. The whole area was, by these works, brought into a first class condition. The cost of this work will be recovered from the owners by action under the Antimalaria Ordinance.

Tel-el-Rish Drainage Scheme.—This scheme, near Mikveh Israel, was completed during the year, and the construction of a new railway culvert was carried out by the Railways. The scheme worked very satisfactorily during the last rains.

Tiberias Lake Shore Works.— The filling of the low areas near Wadi Rubadieh and Knob's Garden along the Tiberias Lake Shore were completed. Since the completion of the Ain Mudawara scheme last year, it was found necessary to concrete the wadi bed leading this water to the Lake. Some 250 metres of this wadi has been concreted. The effect of the works carried out on the lake shore, permitting more efficient antimalarial control to be carried out is shown in the subjoined table of mosquito catches at regularly established catching stations. These records also show that *anopheles elutus* do not migrate long distances from Bteiha to the other control areas as had frequently been suggested.

MOSQUITO CATCHING IN TIBERIAS AREA.

Location and Name of Catching Station	1935					1936				
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Totals	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Totals
Tiberias Lake Shore	7	2	—	10	19	—	—	—	—	—
Tiberias Farmer's Area	14	5	—	11	30	—	—	—	—	—
Tiberias Ahva Quarter	2	1	—	—	3	—	—	—	—	—
Tiberias Ahuzat Bait	2	1	—	—	3	—	—	—	—	—
Tiberias Maymonia Quarter	2	—	—	5	7	—	—	—	—	—
Tiberias Rebi Akiva	1	—	—	—	1	—	—	—	—	—
Migdal Lake Shore	177	153	48	564	942	16	3	—	—	19
Migdal Settlement	201	353	65	370	989	16	5	—	35	56
Tabgha	35	69	25	148	277	42	2	1	29	74
Franciscan House	11	54	8	5	78	1	—	—	—	1
Tel-Hum	6	6	5	177	194	13	1	1	28	43
Knob House	—	—	—	—	—	—	—	—	—	—
Ghewer Abu Shosheh	—	—	—	3	3	6	1	–	11	18
Villa Melchett	—	—	—	—	—	—	—	—	—	—
Russian Garden	—	—	—	—	—	—	—	—	—	—
Samakh	7	17	9	53	86	2	—	—	9	11
Kinereth	2	2	1	—	5	—	—	—	—	—
Hammeh	1	6	11	56	74	1	—	—	1	2
Bteiha	81	1799	245	510	2635	35	47	38	272	392
TOTALS	549*	2468	417	1912	5346	132	59	40	385	616

*No catching made during March, 1935

Naamein River Proposed Drainage Scheme :—Preliminary survey work only was undertaken during the year. The services of Mr. J. C. Carter, Malaria Engineer of the Rockefeller Foundation, were obtained for consultation on this and other antimalarial drainage schemes which will be carried out at some future date.

ANTIMALARIA STATISTICS FOR THE YEAR 1936.

Towns.

Month	Number of fresh possible breeding places discovered				Number of places								
						Breeding							
	Wells	Cisterns	Other Places	Cesspits	Inspected	Anopheles	Culex	Anopheles and Culex	Oiled	Made mosquito-proof by sealing, covering or other means	To which pumps fitted	No. of Prosecutions	No. of kilos of solar oil used
January	16	11	1018	147	257997	3	1466	6	73682	2022	15	48	5364
February	—	2	5256	2548	255791	—	1279	1	69377	5419	3	51	4678
March	9	6	637	546	261554	1	1510	—	73360	769	2	17	5569
April	13	60	3082	1376	268178	3	1977	—	73309	986	81	44	6144
May	—	17	263	64	282424	4	2504	—	75304	298	38	18	5129
June	—	14	3125	295	288877	1	2185	1	77682	1385	2	—	6511
July	5	64	1405	146	311567	1	2310	1	80847	902	11	—	7570
August	—	7	912	35	297156	2	2101	—	77341	445	5	—	7011
September	19	7	126	101	292907	2	1955	—	72452	940	30	—	6525
October	31	13	122	189	304563	3	2079	3	75082	442	5	16	7307
November	8	43	89	102	280543	2	1865	—	71223	484	12	13	5772
December	6	5	22	37	278586	1	849	—	62168	109	2	3	4542
TOTAL	107	249	16057	5586	3380143	23	22080	12	881827	14201	206	210	72122

ANTIMALARIA STATISTICS FOR THE YEAR 1936.

VILLAGES.

	No. of visits to villages	No. of new wells & cisterns found	No. of other new possible breeding places found	No. of places in which mosquito larvae found	No. of places oiled	No. of places closed, repaired and made mosquito proof.	No. of persons treated with quinine	No. of prosecutions	No. of kilos of Paris Green used	No. of kilos of solar oil used	Grammes of quinine expended
January	1526	105	142	1736	35184	130	79	62	1	5816	632
February	1603	43	16	1853	39546	71	166	122	—	6829	1328
March	1485	33	14	1589	36151	134	106	91	89	6564	848
April	1459	69	628	1600	36195	131	82	45	101	6545	656
May	1392	54	25	1355	35532	74	78	14	66	6504	624
June	1350	94	28	860	30678	144	66	4	162	5961	528
July	1454	98	134	1049	32852	144	292	5	154	6302	756
August	1410	35	—	962	31200	130	312	2	165	6455	995
September	1432	4	1	707	27066	93	142	2	94	4944	276
October	1516	100	10	732	26656	146	119	—	137	4634	952
November	1333	7	38	705	25105	131	40	1	131	4233	320
December	1321	37	163	1418	30789	237	35	—	22	5069	280
TOTAL	17281	679	1199	14566	386954	1565	1517	348	1122	69856	8195

Tuberculosis.

45. The modified scheme based on the recommendations contained in the Tuberculosis Survey Report was approved by the Secretary of State during the year, but had to be deferred on grounds of economy.

The scheme which includes the establishment of a 56-bedded hospital sanatorium at Nazareth and a general dispensary service for the whole country is expected to be put into operation in 1937.

During the year under review tuberculosis clinics were held in the larger centres and attracted a fair number of cases but the lack of an institution rendered abortive systematic treatment. A certain amount of artificial pneumothorax work was carried out successfully in the Jerusalem clinic and the results have been very satisfactory.

The following table gives the number of cases of tuberculosis (all forms) attending at the main centres of Jerusalem, Nablus and Jaffa. For reasons stated above, very little could be done for them.

GOVERNMENT CLINICS FOR TUBERCULOSIS.

	Jerusalem	*Nablus*	*Jaffa*
Total Attendance	1331	480	527
No. of cases on register at end of 1935	173	152	68
No. of cases on register at end of 1936	224	181	109
No. of deaths occurring in registered cases during 1936	5	4	13

A certain amount of work was also carried out in Haifa.

Since the Jewish Tuberculosis League caters for the Jewish section of the population, the above figures are mainly representative of the Arab community.

In addition, numerous cases were recorded at departmental general clinics in the smaller centres, and general treatment was carried out in all instances.

The Jewish Tuberculosis League carried on its activities as in previous years, in all 2233 cases having been recorded by the end of 1936. The 30 beds subsidised by Government for this disease at Safad Hospital were occupied during the year, while 126 new cases were treated at a small sanatorium in Jerusalem. In addition, 49 children were accommodated at the Mount Carmel Sanatorium, Haifa, during the summer months.

Regarding notifications, 201 deaths from Tuberculosis (all forms) were reported during the year. These are representative of towns only, since village notification is defective.

Ankylostomiasis.

46. The re-survey of the Jaffa district, though hampered and interrupted, was continued throughout the year, but will not be completed for some considerable time.

Altogether 2968 examinations were carried out, 2450 being first examinations before treatment and 518 being re-examinations after treatment.

The percentage incidence among the untreated was 32.4% and amongst those previously treated 7.8%, a satisfactory decline. Though village sanitation was continued satisfactorily in all districts, 4708 latrines being installed in 45 villages during the year, it was found impossible to inaugurate the Department's scheme for the sanitation of the orange groves in collaboration with grove owners. It is hoped that this latter work will be commenced at the end of the orange season in 1937, since there can be no doubt that the orange groves themselves produce conditions suitable to the development of the hookworm larvae.

It is also proposed to carry the ankylostomiasis survey into Jewish colonies in the citrous belt.

The accompanying map shows the distribution by intensity of ankylostomiasis in Palestine as far as the present investigation goes.

Schistosomiasis.

47. An investigation into the incidence of schistosomiasis in the Auja River basin (Jaffa district) was commenced late in the year, but the available figures are as yet too small to be of epidemiological value.

So far 64 cases of the disease (*S. heamatobium*) have been investigated in villages in this region and a certain number of cases have occurred in school children in Tel-Aviv. From the available information, the majority of those infected give a history of having bathed in the Auja river, and though the molluscan hosts have not yet been identified, it is probable that a future survey will demonstrate their presence and infectivity.

It is hoped to carry out a more thorough and intensive investigation into the sources of infection early in 1937, and this will be coupled with treatment of infected cases and propaganda regarding prevention and control of the disease.

Village Sanitation.

48. A gratifying feature of the year's work was that despite the difficulties associated with the disturbances, the work of installing latrines in villages was carried on practically without interruption.

Though a certain amount of work was done in the Jerusalem district, the areas chiefly concerned were in the southern district, where the prevalence of hookworm infestation makes village sanitation more immediately important.

Altogether 4708 latrines were installed in 45 villages during the year, of which 879 were of the tar-barrel variety and 3829 of the bored-hole type, the majority of the latter being in the southern district.

Treatment of Ophthalmic Disease.

49. Apart from ophthalmic work carried out at general out-patient dispensaries, there are six centres at which the ophthalmic treatment is carried out in a special section of the dispensary. In addition, there are two special ophthalmic clinics in Southern Palestine forming centres for the special work of combatting acute epidemic conjunctivitis during the summer months, and from which the temporary village first aid posts are supervised.

There were twenty-two such centres in operation for varying periods of the year staffed by trained orderlies or nurses.

The Mobile Ophthalmic Unit carried on its work satisfactorily, and during the six months it was in the field, operated successfully in 18 villages of the southern district.

In contrast to the experience of 1935 the epidemic of acute conjunctivitis was this year of milder type and attended with fewer complications. The incidence of corneal ulceration also showed a gratifying decline. A closer follow up of these cases is being conducted during the winter months and operative treatment of threatening glaucoma is carried out when required.

Despite the disturbances, a general increase in the number of total attendances was recorded for the year, being 864,647 as compared with 755,000 in 1935. Of these 63,480 were new cases. Of these cases 45% were suffering from acute conjunctivitis of whom 3% were complicated with ulceration.

The school medical service also carried out a considerable amount of treatment of eye disease, though the fact that Government schools were closed for a lengthy period caused a fall in the figures as compared with 1935. The number of attendances for treatment in the schools was 1,856,250 of whom 7986 were new cases.

At general out-patient dispensaries of the Department there were 7556 cases of eye disease amongst new patients.

Survey of Palestine, Jaffa 1937.

Map P 7 (37)

SUMMARY OF OPHTHALMIC RETURNS — 1936.

Location	Total Attendances	Number of New Patients	No. Admitted to Hospital	Operations		Classification of conditions found in new patients											
				Trichiasis	Other Conditions	Clear Lids	Acute Conjunctivitis	Acute Conjunctivitis with Corneal Ulceration	Trachoma	Trachoma with Corneal Ulceration	Corneal Ulcers other than above	Corneal Conditions other than Ulcers	Endophthalmia	Varia	Blind in both eyes	Blind in one eye	
Beersheba	34489	674	6	—	2	275	201	8	399	80	10	28	14	191	9	42	
Gaza	97523	3238	1	20	36	726	1884	89	2512	137	99	135	273	617	3	203	
Acre	34116	2222	1	29	41	541	1372	64	1681	179	36	58	13	871	17	42	
Nablus	44385	1309	—	14	14	535	466	10	774	176	17	133	10	230	8	15	
Tulkarm	35152	4173	—	19	—	1422	1423	36	2751	398	103	245	146	551	6	89	
Jaffa	44129	4150	1	26	4	1197	1605	71	2953	606	39	588	32	1270	49	165	
Safad	22934	3369	—	2	—	1740	1784	2	1629	24	11	65	—	354	2	46	
Ramleh	51889	6134	3	—	14	992	2093	32	5142	944	28	644	173	1328	56	404	
Hebron	68890	6820	—	35	4	3588	3621	16	3232	178	16	691	221	2232	21	192	
Majdal	70147	3366	—	1	—	681	1505	142	2685	344	7	752	96	533	62	205	
Khan Younis	28451	2966	—	—	—	1171	1814	23	1795	103	49	208	54	381	2	66	
Beit Jibrin	20486	1332	—	—	—	554	642	1	778	37	1	105	23	291	7	19	7 months
Yatta	21243	1201	—	—	—	569	420	6	632	61	3	243	29	376	7	41	7 ,,
Tarqumia	15045	1014	—	—	—	382	408	4	632	58	2	234	45	325	5	40	7 ,,
Ajjour	23611	1549	—	—	—	615	536	5	934	75	5	247	67	422	8	84	7 ,,
Beit Omar	12237	621	—	—	—	324	191	9	297	16	3	71	13	176	3	10	7 ,,
Doura	10257	657	—	—	—	297	215	5	360	57	4	153	50	254	3	27	6 ,,
Dawaimeh	13606	641	—	—	—	300	334	3	341	40	3	156	22	183	6	14	5 ,,
Yebna	18153	694	—	—	—	95	239	4	599	79	1	144	13	64	1	48	8 ,,
Esdud	12667	665	—	—	—	90	180	11	575	115	1	189	32	91	9	45	8 ,,
Mesmiya	25024	792	—	—	—	111	250	9	681	69	1	209	25	74	8	58	8 ,,
Faluja	27762	618	—	—	—	109	328	19	509	79	1	127	16	86	6	39	8 ,,
Bureir	6885	489	—	—	—	72	131	7	347	54	2	97	24	33	5	26	7 ,,
Quzaze	3355	429	—	—	—	100	101	7	329	6	20	4	—	4	3	18	3 ,,
Zeita	17458	1622	—	—	—	506	1380	27	1116	29	1	1	—	—	4	27	6 ,,
Beit Nuba	8255	1084	—	—	—	150	391	20	934	95	2	32	—	70	33	65	4 ,,
Hamameh	1672	160	—	—	—	20	104	22	140	25	—	39	12	27	5	13	1 ,,
Yahudieh	20034	2144	—	—	—	228	846	59	1916	—	—	—	—	—	6	57	6 ,,
Yabed	12669	797	—	—	—	224	301	23	573	181	—	5	58	—	—	—	7 ,,
Bidieh	14878	543	—	—	—	221	220	11	322	47	11	74	2	108	2	15	6 ,,
Tarshiha	21670	1421	—	—	18	773	663	82	648	94	236	186	—	300	—	8	8 ,,
Anabta	5845	682	—	—	—	133	441	30	549	150	—	47	—	90	—	27	4 ,,
Mobile Section	19730	5904	—	—	—	715	1600	39	5189	810	7	1599	156	569	104	488	7 ,,
TOTALS	864647	63480	12	146	133	19456	27689	896	43954	5346	719	7509	1619	12101	460	2638	

Venereal Disease.

50. The appointment of a specialist medical officer for this work late in 1935 and the addition to the staff of two British women medical officers for the treatment of women's diseases in particular enabled more systematic attention to be paid to the problem of venereal disease, and a considerable development in the work can be recorded for the year.

Male clinics functioned at Jerusalem, Haifa, Jaffa and Nablus fairly successfully, though the lack of special premises separate from the general outpatient clinics was a distinct drawback. This has now been remedied at Haifa and Jaffa where separate accommodation has been made available, and it is hoped that the same may be accomplished in Jerusalem in 1937.

Through the medium of gynaecological clinics in Jerusalem, Haifa, Jaffa, Nablus and Acre, the women medical officers have been able to make contact with the rather difficult problem of venereal disease in women and considerable progress has already been effected.

Facilities for the free treatment of this group of diseases amongst seamen of all nationalities are also available in special premises at the port of Haifa, and at the District Health Office in the port of Jaffa.

During the year under review, a total number of attendances of 9729 was recorded at all clinics, of whom 3790 were male and 5939 were female. These attendances represent approximately 713 cases of whom 507 were male 206 were female, this despite the fact that both Jaffa and Nablus women's clinics did not function during the period of the disturbances.

Endemic Syphilis. (Hebron & District).

51. This campaign was interrupted during the disturbances, but in October, an extra medical officer was appointed for this work entirely and the whole campaign completely re-organised.

This involved for Hebron town a re-survey of the old registers dating from 1924, and the compiling of a new register based on the cases still existing and requiring treatment.

In the district, 150 positive cases at Tarqumia completed a first course of treatment and a survey of Beit Jibrin resulted in the finding of 102 positive cases.

Treatment of all investigated cases will be continued during the forthcoming year in Hebron town, a second course of treatment will be dispensed at Tarqumia, and treatment will be commenced in Beit Jibrin.

SECTION IV.

MEDICAL.

Government and Municipal Hospitals.

52. The number of beds in Government and Municipal Hospitals was 844 during the year, compared to 781 in 1935. The increases occurred in Tel Aviv Municipal Hospital 234 beds and in the temporary Government Infectious Hospital at Bnei-Braq North of Tel-Aviv where 20 beds in a leased building were established to obviate the necessity of Jewish cases being transported during the disturbances through Jaffa to the infectious section of the Government hospital at Ajami. The establishment of the small Infectious Hospital for Jews separately was precipitated by the murder near the Government Hospital of two Jewish probationer nurses.

The Jaffa Municipal Hospital was taken over entirely by the Department as from 1st April, 1936.

The previous dual control in which the Municipality shared in the maintenance by paying for non-technical services, while the Department posted, paid and controlled the technical staff and services, had proved impracticable.

With funds accumulated from hospital treatment fees the Municipality of Jaffa to whom the hospital buildings belong, constructed an admission block comprised of waiting room, clinic, and Medical Officers' and hospital clerk's room, and an extension to the X-Ray Section. These constructions added much to the amenities of the hospital.

New projects referred to in the report for 1935 were all, except that of Haifa hospital deferred and deleted from the draft estimates of 1937/38 on account of general Government economies.

This means that the construction of the General and Infectious Hospital at Haifa will proceed, but the Infectious Hospital at Jerusalem, the Maternity Section at Jaffa Hospital, and the Maternity Section and Nurses Quarters at Nablus, which allowed an increase of 15 beds for general cases, and the Nurses Quarters at Safad which permitted the expansion in beds in the hospital will not be put in hand in 1937/38.

A commencement may be made on the Ramleh Hospital and the Tuberculosis Hospital-Sanatorium at Nazareth if capital credits permit.

It continues to be very unsatisfactory that, beyond the 11 beds in the hospital isolation section in Jerusalem suitable for suspect and special cases, there is no infectious hospital for the city of Jerusalem and the sub-districts of Jerusalem, Ramallah, Bethlehem and Hebron.

The British Section, in Bute House, of the Government Hospital, Jerusalem, was more than fully occupied during the year and is now inadequate for the accommodation of British Government officers, wives and children, the expanded British Police Section and their wives and children, and for the increased number of families of Army and R.A.F. Officers, and the much larger British community. Expansion, for which a proposal has been put forward, is now essential.

At Haifa Government Hospital the Senior Medical Officer, Railways, who is also in charge of British officers and their families was posted as surgeon to the Hospital in addition to his other duties.

The daily average number of beds occupied in Government and Municipal hospitals was 702 compared with 618 in 1935. The total number of admissions was 18,814 compared with 17,608 in the previous year. There were 7724 Moslems, 8552 Jews, 2409 Christians and 129 persons of other communities treated in these hospitals during the year. The total number of sick days was 243,385 as compared with 201,427 in 1935. The patients treated included 155 members of His Majesty's Forces, 12 Trans-Jordan Frontier Force, 395 British Police, 616 Palestine Police, 292 Railway Employees, 727 other Government employees, and 226 prisoners. In addition there were 1209 prisoners treated in the sick detention wards of the Central Prisons and 12 prisoners in the special ward for tuberculosis cases in Acre Prison.

Radiology.

53. Without material additions to the radiological installations, this branch advanced considerably in efficiency and in amount of work accomplished on account of the appointment during 1936 of a radiologist, who, stationed at the Jerusalem X-Ray section, is responsible for inspection of all Departmental X-Ray installations in Palestine.

At the X-Ray Section in Jerusalem 1867 cases were dealt with and 3417 radiographs taken. At Haifa 1363 cases were dealt with and 2274 radiographs taken; Jaffa 570 cases with 959 radiographs; Nablus (Portable Set) 61 cases with 116 radiographs.

Hospital Surgery and Medical Care of British Community by the Specialist.

54. (a) BRITISH SECTION — VISITS AND CONSULTATIONS.

11,262 visits and consulations are recorded for the year in homes, clinics and hospitals throughout the country, mostly in Jerusalem. This is the largest number to date and is exceptionable in spite of the disturbances and the absence of the Surgeon Specialist on vacation leave. The greatest incidence was in July, but from June to December the number was consistently high. This may have been due to some extent to the results of the strain of the disturbances, though there was no epidemic disease in sufficient numbers to account for any marked increase. There were more wound cases than in any other year, particularly among the Army admissions and there was an increase in Maternity cases to a total of 28, 16 boys and 12 girls being born.

(b) BRITISH SECTION (BUTE HOUSE), GOVERNMENT HOSPITAL, JERUSALEM.

282 cases were admitted, classified as follows :—

131	British Police.
19	Government Officials (Male)
6	Government Officials (Female)
29	Army and R.A.F.
7	Non-officials (Male)
90	Women and children.

11 visitors were admitted, included in above.

12 deaths occurred in the year; two of these were brought in dead (Army cases), one died of wounds immediately on admission (Police), three died of internal wounds after operation, one child died of pneumonia, two of metastases from cancer, one malignant malaria (Army), one elderly woman from late asthenia after fracture of the thigh and one Government Official died in his hotel of pneumonia.

There were 118 operations on British Subjects ,37 of which were in connection with the disturbances; there were 12 appendicitis, 6 forceps deliveries and a variety of general cases, comprising a fair proportion of abdominals.

(c) SURGERY IN THE JERUSALEM HOSPITAL.

1389 operations were performed, an increase of 319 on the previous year; 469 of these were major. Excellent team work was maintained during the disturbances, illustrating a loyalty and real cooperation of a highly commendable character. A great many of the urgent cases were brought in during the night and considering the severity of some of the wounds, abdominal and otherwise, the three deaths after operation is a smaller number than expected. List (f) below gives some idea of the type of cases.

(d) DISTRICT AND OTHER HOSPITALS.

48 visits were made, 17 to Government Hospitals; Haifa 4, Nablus 5, Ramleh 1, Jaffa 7. There were 13 visits to Army stations and 18 to local Jerusalem hospitals.

(e) HOSPITAL AMENITIES.

Bute House in Jerusalem was taxed to more than its normal capacity on many occasions in the year; as many as 24 cases were accommodated with a bed strength of 16. This occurred mainly in the last three months of the disturbances, but there is a definite need for more beds permanently, as more maternity cases are appearing in the Police families and the great increase in the British Police Force keeps the beds almost constantly occupied. Nursing staff also is fully occupied and an increase will be necessary.

Improvements are gradual and the most marked has been in the better supervision in X-Ray work by the newly appointed radiologist, who makes regular visits to the main hospitals. In Jerusalem, this Department has had greater demands than ever and the provision of more commodious quarters in a more convenient place in the hospital would make the work much easier. Newer apparatus is also a necessity, not only for time-saving, but better results. 1867 cases were examined and 3417 films taken in the year; there was a large increase of abdominal, kidney and chest cases and many for localization of foreign bodies.

(f) MAJOR OPERATIONS IN JERUSALEM HOSPITAL.

Among these were the following :—

Appendicectomy		32
Amputations		12
Cholecystectomy		1
Cholescystostomy		1
Debridement of compound fractures		37
Fracture of skull		4
Gastroenterostomy		1
Haemorrhoidectomy		8
Herniotomy		22
Laparatomy		28
Liver conditions		2
Mastoidectomy		4
Nephrectomies		1
Osteotomy		13
Orchidectomy		1
Obstetric & Gynaecological		146
Curettage	59	
Forceps	34	
Hysterectomy	1	
Ovariotomy	2	
Versions	12	
Ectopic	1	
Others	1	
Phrenicectomy		3
Foreign bodies		17
Rib resection		5
Tumours and cysts		16
Tonsils		10

Medical care of the British Community of Haifa and District by the Senior Medical Officer, Railways.

55. The Senior Medical Officer, Railways, has been in charge of the British Section of the Government Hospital, Haifa, and has had the care of the British official community of Haifa and district through the greater part of the year. He was on leave to the United Kingdom until the end of February, 1936, and during this time, his duties were carried out by Dr. J. MacQueen and Dr. Hamzeh. The Surgeon Specialist, Jerusalem, also made regular visits.

From March to June, the Senior Medical Officer, Railways, made regular weekly visits to Jerusalem, the Surgeon Specialist being on leave.

The British Section was particularly busy in the months from April to August, owing to the greatly augmented number of troops and the continued presence of units of the 3rd Cruiser Squadron of the Royal Navy and other naval ships. Adequate military hospital accommodation was not arranged before August.

The British section sufferred at this time, owing to unforeseen shortage of British nursing staff, and for much of this time, there were only two nursing sisters who took alternate months on day and night duty. This emergency emphasized the necessity for a permanent staff of at least four nursing sisters in Haifa, in addition to the matron. Later in the year, this staff was realised.

The accommodation in the section has remained the same, and at times there has been difficulty in accommodating women patients and patients entitled to 1st class rooms.

A consulting room was constructed for the use of the Senior Medical Officer. Railways, and has proved a great convenience.

The health of the British community in 1936 has been generally good and there has been no widespread epidemic — apart from the usual incidence of sandfly fever amongst police and troops. There were 5 cases of scarlet fever — all but one amongst troops, and one case of typhus fever.

Admissions of British subjects to the hospital numbered 251. This is an increase of 16 in comparison with 1935.

This number was contributed from the following categories :—

British Police	94
Other Government officials	12
Women and children	41
Royal Navy	38
Army	36
Non-government men	30
	251

The following surgical operations were performed :—

Appendicectomy	14
Nephro-retero-lithotomy	2
Cystoscopy	2
Caesarian section	2
Thoracotomy	2
Oorphorectomy & Appendicectomy	1
Radical cure of strangulated femoral hernia	1
Exploration of knee joint	1
Open reduction of fracture supr. maxilla	1
Open reduction of fracture tibia & fibula	1
Extraction of bullets and fragments of bullets	4
Excision of fistula-in-ano	1
Drainage of ischio-rectal abscess	1
Ligature & excision of varicose veins	1
Amputation of avulsed portion of thumb	1

There was one death of a British subject, in the hospital, from paratyphoid A, complicated by severe intestinal haemorrhage.

The Senior Medical Officer, Railways, continued in charge of the surgical work of the Government Hospital, Haifa.

He has worked in collaboration with the Medical officer in charge of the hospital, and it can be recorded that not only has the amount of surgical work increased, but that its quality has improved. Two factors have particularly assisted towards this result.

In the first place, the appointment of a qualified resident clinical assistant, and secondly, the provision of more staff nurses.

In the summer months, the time of the clinical assistant is largely taken up with medical work in the infectious section, and a hospital of 170 beds could easily do with two resident clinical assistants, each of whom might do six months on the surgical and medical side, and change over at the end of six months.

Government and Municipal Dispensaries & Clinics.

56. Outpatient treatment of Government employees is provided at fifteen Government clinics, three medical inspection rooms and two special clinics for railway employees. At the general clinics, poor persons are also treated. The principle of requiring the payment of a small fee is maintaned, but in undoubted cases of indigence payment is waived.

In 12 villages, in which medical assistance cannot otherwise be obtained, Government medical officers hold weekly clinics. The villages selected are those which form centres for surrounding areas and the clinics are generally arranged to be held on market day.

The total attendances at Government outpatient treatment centres were 386,363 compared with 344,600 in 1935. New cases reporting for the first time numbered 139,968 the corresponding figure for 1935 was 126,287.

These figures exclude attendances at ophthalmic clinics, and at the special railway clinics, the work of which is described in other sections of this report.

Voluntary Hospitals and Clinics.

57. There were no new public hospitals opened during the year, but the Kupat Cholim (Medical Benefit Society of the Jewish General Labour Federation) opened a hospital of 66 beds near Petah-Tiqvah for its members. The construction and equipment of this hospital was assisted by a grant of £P.8,000 from Government.

VOLUNTARY VILLAGE CLINICS 1936.

	Number of Clinics held	Total Attendances	Total New Cases	Malaria	Eye Diseases	Other Diseases	Moslems	Christians	Jews	Others
Jewish Federation of Labour	12225	444839	211211	760	8169	202282	2094	81	209034	2
Rural Sick Benefit Fund	6761	118070	26582	516	1520	24546	1665	28	24889	—
Jewish Federation of Labour and Rural Sick Benefit Fund Combined	1953	56016	17444	103	411	16930	422	19	17003	—
Committees of Settlements	1046	13607	6784	12	288	6484	365	—	6419	—
Church Missionary Society	255	12807	5426	327	1171	3928	4056	1370	—	—
Jerusalem & The East Mission	53	880	464	9	67	388	460	8	1	—
TOTALS	22293	646219	267911	1727	11626	254558	9062	1501	257346	2

Training of Nurses.

58. Examinations for Government graduate nurses certificates were held in April and October. The examining boards who conducted the examinations were appointed from amongst the doctors and matrons of hospitals recognised as training schools.

The following were the results of the examinations held in 1936 :

Name of Hospital	First Year	Second Year	Third Year
Government and Municipal Hospitals	20	17	9
Hadassah (Rothschild)	15	18	18
Church Missionary Society	7	4	2
English Hospital, Jerusalem	2	—	1
E.M.M.S. Hospital, Nazareth	5	1	—
Scots Hospital, Tiberias	4	2	1
St. Luke's Hospital, Hebron	—	2	1
TOTAL	53	44	32

Since 1920 four hundred and twenty four nurses have completed the course of training and have been awarded the graduate nurse's certificate.

Five graduate nurses and eleven pupil midwives completed the course of training at the Midwives Training School of the Department. This is the maximum number that can be taken for training each year.

There was no examination of nurses from the Hadassah Medical Organization Training School for Midwives.

HOSPITAL NURSING STAFFS — 1936.

Name of Organization	Bed Strengths	Matrons and British Nursing Sisters	Staff Nurses	Nurses under Training 1st year	Nurses under Training 2nd year	Nurses under Training 3rd year	Number not under training	Total
GOVERNMENT AND MUNICIPAL HOSPITALS Including Mental Hospitals and Ramleh Casualty Post.	1010	22	79	33	21	21	82	258
VOLUNTARY HOSPITAL ORGANIZATIONS								
Hadassah Medical Organization	246	2	42	15	17	18	13	107
Jewish Federation of Labour (Kupat Cholim)	222	3	48	19	—	—	—	70
Church Missionary Society	163	5	6	11	7	4	3	36
The Order of St. John of Jerusalem	45	1	2	—	—	—	2	5
Tutors and Protectors of the Jewish Coummunity in the Holy Land, Amsterdam	53	1	4	—	—	—	13	18
Misgab Ladach	34	1	2	—	—	—	3	6
Bicur Cholim Society	140	1	4	—	—	—	28	33
Italian Hospital, Jerusalem	60	1	18	—	—	—	—	19
British Mission to Jews	70	4	3	2	2	—	1	12
International Moravian Society London (Leper Hospital)	60	1	4	—	—	—	—	5
German (Deaconness) Hospital, Jerusalem	80	1	8	—	—	—	17	26
German Temple Society, Jaffa	20	1	2	—	—	—	1	4
Jerusalem and the East Mission	32	1	2	3	1	2	1	10
Italian Association, Haifa	50	1	14	—	—	—	—	15
St. Charles Congregation, Haifa	40	1	6	—	—	—	3	10
Edinburgh Medical Mission Society	70	3	2	8	1	1	—	15
United Free Church of Scotland	60	1	4	3	3	2	—	13
Ezrath Nashim Womens Society Home for Insane and Incurables	60	1	—	—	—	—	14	15
French Hospitals	376	5	33	—	—	—	39	77
Jewish Community, Haifa	46	1	16	—	—	—	—	17
Jewish Rural Sick Benefit Fund	26	1	4	—	—	—	6	11
TOTALS	2963	59	303	94	52	48	226	782

GOVERNMENT AND MUNICIPAL HOSPITALS 1936.

GENERAL AND INFECTIOUS.

Location of Hospital	Nominal Bed-Strength				Admissions					Deaths	Discharges	Daily average in Hospital
	General	Isolation	British	Maternity	Moslems	Christians	Jews	Other Religions	Total			
Jerusalem Government	73	11	16	16	1633	1015	207	1	2856	143	2687	84.8
Haifa ,,	74	70	9	18	1586	805	605	123	3119	180	2914	117.4
Jaffa ,,	67	73	7	3	1813	360	174	2	2349	136	2217	78.2
Nablus ,,	59	19	4	3	1465	64	3	—	1532	147	1358	63.9
Safad ,,	—	28	—	—	524	98	106	3	731	40	682	22.1
Beersheba ,,	8	—	—	—	200	20	—	—	220	14	206	7.8
Tel-Aviv Municipal	211	—	—	23	1	6	7216	—	7223	562	6666	303.1
Gaza ,,	24	4	2	2	502	41	1	—	544	36	514	15.3
Bnei-Brak Government	—	20	—	—	—	—	240	—	240	5	218	14.6
TCTALS 1936	516	225	38	65	7724	2409	8552	129	18814	1263	17462	707.2

PRISON SICK DETENTION WARDS 1936.

Jerusalem	12	507	31	94	—	632	—	637	9.1
Acre, General Ward	26	482	39	43	13	577	—	568	18.5
Acre, Tuberculosis Ward	20	10	—	2	—	12	—	15	11.8
Acre, Criminal Lunatic Ward	14	4	—	3	—	7	1	4	24.6
TOTALS 1936	72	1003	70	142	13	1228	1	1224	64.0

GOVERNMENT AND MUNICIPAL DISPENSARIES AND CLINICS EXCLUSIVE OF OPHTHALMIC AND OTHER SPECIAL CLINICS—1936.

LOCATION	Total Number of Attendances	NEW CASES							
		Total new Cases	By Diseases			By Religions			
			Malaria	Eye Diseases	Other Diseases	Moslems	Christians	Jews	Other Religions
Jerusalem Dispensary	21241	11719	24	112	11583	7204	2911	1604	—
Ramallah ,,	3364	2824	15	91	2718	2128	696	—	—
Hebron ,,	4786	2839	18	—	2821	2575	258	6	—
Beersheba ,,	11932	5643	87	—	5556	5292	349	2	—
Jaffa ,,	29980	9767	47	—	9720	7353	1180	1234	—
Ramleh ,,	46136	13275	42	—	13233	12119	1093	63	—
Gaza ,,	10737	5211	—	—	5211	5085	126	—	—
Majdal ,,	36337	10593	—	—	10593	10195	398	—	—
Haifa ,,	13085	8691	9	116	8566	4233	2764	1471	223
Acre ,,	13117	7996	328	47	7621	6724	1146	90	36
Nablus ,,	35576	8813	219	—	8594	8508	301	3	1
Tulkarem ,,	13169	2040	34	—	2006	1975	62	—	3
Jenin ,,	19988	11095	187	1378	9530	10743	340	—	12
Beisan ,,	7275	4008	—	1079	2929	3757	238	3	10
Safad ,,	21235	5935	78	—	5857	5244	246	427	18
Tel-Aviv ,,	1469	1035	5	15	1015	2	57	976	—
Nazareth Medical Inspection Room	4954	3857	—	232	3625	1916	1922	19	—
Tiberias ,, ,, ,,	10639	5595	1	2319	3275	5103	291	201	—
Bethlehem ,, ,, ,,	1468	817	60	4	753	549	266	2	—
Tel-Aviv Municipal Dispensary	79875	18215	4	2163	16048	—	—	18215	—
TOTALS	386363	139968	1158	7556	131254	100705	14644	24316	303

VOLUNTARY HOSPITALS 1936.

Name and Location of Hospital	Nominal Bed Strength	ADMISSIONS					Deaths	Discharges	Daily average in Hospital
		Moslems	Christians	Jews	Unclassified and Other Religions	Totals			
JERUSALEM:									
Ophthalmic Hospital of the Order of St. John of Jerusalem	45	593	83	3	—	679	—	662	27.2
St. Louis (French) Hospital	150	728	656	20	—	1404	45	1351	42.2
Italian Hospital	60	283	574	29	—	886	31	850	25.6
Rothschild (Hadassah) Hospital	190	1	1	4756	—	4758	242	4490	167.1
English (British Mission to Jews) Hospital	70	4	56	1057	—	1117	15	1121	49.2
Shaare Zedek Hospital	53	6	7	1145	—	1158	52	1096	31.5
Mizgab Ladach Hospital	34	—	—	211	—	211	17	197	10.6
New Bicur Cholim Hospital	120	—	—	1169	—	1169	108	1096	64.2
Old Bicur Cholim Hospital	20	—	—	13	—	13	7	6	19.7
Lepers (International Moravian Soc.) Hospital	60	2	—	1	—	3	3	1	26.4
Deaconness (German) Hospital	80	932	791	20	1	1744	80	1657	56.6
Convalescent Home (Kupat Cholim) Motza	84	—	—	1151	—	1151	—	1174	58.5
BETHLEHEM:									
French Hospital	80	305	551	1	—	857	21	828	29.6
HEBRON:									
St. Luke's (J'lem & The East) Hospital	32	606	1	—	—	607	54	548	16.6
JAFFA:									
French Hospital	90	732	235	32	—	999	51	960	36.2
German Hospital	20	44	141	3	—	188	10	185	4.2
Kupat Cholim Hospital, Petah Tiqva	66	—	—	477	—	477	13	384	51.8
Church Missionary Society Hospital	58	—	—	—	670	670	30	641	18.7
GAZA:									
Church Missionary Society Hospital	60	—	—	—	1035	1035	49	988	25.7
HAIFA:									
Jewish Community Hospital	46	2	—	1573	—	1575	89	1484	53.8
Italian Hospital	50	175	185	114	14	488	16	488	24.0
German Hospital	40	348	300	657	6	1311	41	1269	40.5
NAZARETH:									
Edinburgh Medical Mission Society Hospital	70	1202	264	—	—	1466	81	1372	42.6
French Hospital	56	547	339	—	—	886	25	864	20.3
AFULLA:									
Kupat Cholim Hospital	72	—	2	1963	—	1965	31	1934	53.6
NABLUS:									
Church Missionary Society Hospital	45	570	59	—	2	631	22	604	16.6
TIBERIAS:									
United Free Church of Scotland Hospital	60	801	141	154	1	1097	50	1067	32.6
Jewish Rural Sick Benefit Fund Hospital	26	12	2	800	—	814	21	786	25.6
SAFAD:									
Hadassah Hosp. for Tuberculous Patients	58	1	—	119	—	120	10	116	53.2
TOTALS	1895	7894	4388	15468	1729	29479	1214	28219	1124.4

VOLUNTARY DISPENSARIES AND CLINICS—1936.

Name of Dispensary or Clinic	Total Attendances	NEW PATIENTS							
			By Diseases			By Religions			
		Totals	Malaria	Eye Disease	Other Diseases	Moslems	Christians	Jews	Unclassified and other Religions
JERUSALEM.									
Shaare Zedek Hospital	30091	4766	—	—	4766	88	25	4653	—
Misgab Ladach Hospital	8292	4733	—	1304	3429	159	11	4563	—
French (St. Louis) Hospital	32024	15112	124	4647	10341	6702	6377	2033	—
Ophthalmic Hospital of the Order of St. John	75100	14327	—	14327	—	10677	2970	680	—
Hadassah (Rothschild) Hospital	70449	13218	—	2783	10435	24	42	13152	—
British Mission to Jews Hospital	29164	14303	4	713	13586	157	285	13861	—
Armenian Convent Dispensary	207	58	—	—	58	—	58	—	—
Italian Hospital	4898	1548	—	—	1548	710	564	274	—
New Bicur Cholim Hospital	14267	4117	—	—	4117	—	—	4117	—
Old Bicur Cholim Hospital	1247	1247	—	—	1247	—	—	1247	—
Kupat Cholim Dispensary	106272	32092	1	2909	29182	87	—	32005	—
German Hospital	15670	7817	—	—	7817	4044	1991	1782	—
Moslem Polyclinic	7128	6660	—	5	6655	6575	78	7	—
HEBRON.									
St. Luke's Hospital	9151	2616	23	270	2323	2557	53	4	2
Moslem Polyclinic	4694	4424	—	25	4399	4424	—	—	—
Hesed le Abraham Dispensary	3414	288	4	33	251	251	8	29	—
RAMALLAH.									
Soeurs de Joseph Dispensary	8364	8213	—	5972	2241	3262	4951	—	—
BETHLEHEM.									
French Hospital	11561	1661	—	806	855	846	815	—	—
JAFFA.									
Church of Scotland Dispensary	692	626	2	2	622	114	29	483	—
Church Missionary Society Hospital	6045	2817	343	61	2413	—	—	—	2817
French Hospital	28585	4799	17	1685	3097	4799	—	—	—
St. George's Dispensary	3316	2283	—	32	2251	790	1487	6	—
Jewish Medical Association, A Clinic	44298	16470	—	1593	14877	—	—	16470	—
Jewish Medical Association, B Clinic	18386	7427	6	1204	6217	—	—	7427	—
Kupat Cholim Dispensary	755603	252368	118	36803	215447	758	—	251610	—
Agudat Israel Clinic	1654	517	—	73	444	234	—	283	—
GAZA.									
Church Missionary Society Hospital	7927	4308	129	160	4019	4016	291	—	1
HAIFA									
German Hospital	8268	6756	—	1471	5285	3657	2546	553	—
Jewish Community Hospital	25165	7982	—	1808	6174	75	11	7896	—
Italian Hospital	6920	3103	117	2	2984	1375	744	953	31
British Jews Society Clinic	17040	3248	20	127	3101	393	501	2353	1
Kupat Cholim Dispensary	299161	131706	111	19723	111872	1676	565	129465	—
Moslem Polyclinic	7941	3790	344	318	3128	3656	121	13	—
French Dispensary	21635	3517	373	482	2662	2565	914	30	8
NAZARETH.									
Austrian Dispensary	5030	4768	—	1738	3030	2914	1854	—	—
Edinburgh Medical Mission Hospital	12239	6934	—	827	6107	4315	2607	12	—
French Hospital	17096	13428	766	2218	10444	9634	3792	2	—
NABLUS									
Church Missionary Society Hospital	8546	3781	181	415	3185	3781	—	—	—
TIBERIAS									
Hadassah Dispensary	25688	3443	—	2069	1374	170	—	3273	—
Scots Mission Hospital	9052	2864		141	2487	2170	284	397	13
SAFAD.									
Hadassah Hospital	13087	1113	236 4	16	1093	27	—	1086	—
TOTALS.	1775367	625248	2923	106762	515563	87682	33974	500719	2873

TABLE OF PATIENTS IN GOVERNMMENT, MUNICIPAL AND VOLUNTARY HOSPITALS 1936.

Names of Hospitals	British		Other Foreigners			Palestinian			Totals		
	Jews	Christians	Jews	Moslems	Christians and Others	Jews	Moslems	Christians and Others	Jews	Moslems	Christians and Others
Misgab Ladach, Jerusalem	—	—	48	—	—	163	—	—	211	—	—
St. Louis (French), Jerusalem	—	5	8	8	92	12	720	559	20	728	656
Ophthalmic, Order of St. John, Jerusalem	—	7	—	—	—	3	593	76	3	593	83
Rothschild (Hadassah), Jerusalem	21	—	1845	—	—	2890	1	1	4756	1	1
Church Mission to the Jews, Jerusalem	1	10	—	—	6	1056	4	40	1057	4	56
Ezrath Nashim, Jerusalem	—	—	—	—	—	24	—	—	24	—	—
Shaare Zedek, Jerusalem	12	—	412	—	3	721	6	4	1145	6	7
Bicur Cholim (New), Jerusalem	—	—	461	—	—	708	—	—	1169	—	—
Bicur Cholim (Old), Jerusalem	—	—	5	—	—	8	—	—	13	—	—
Italian, Jerusalem	—	—	—	—	—	29	283	574	29	283	574
German (Deaconness), Jerusalem	3	23	8	37	228	9	895	541	20	932	792
French, Bethlehem	—	2	—	2	42	1	303	507	1	305	551
St. Luke's, Hebron	—	1	—	—	—	—	606	—	—	606	1
Convalescent Home (Kupat Cholim), Motza	—	—	—	—	—	1151	—	—	1151	—	—
Church Missionary Society, Jaffa										670*	
French, Jaffa	—	—	12	14	33	20	718	202	32	732	235
German, Jaffa	—	—	—	—	122	3	44	19	3	44	141
Church Missionary Society, Gaza	—	2	—	—	—	—	1009	24	—	1009	26
Jewish Community, Haifa	2	—	949	—	—	622	2	—	1573	2	—
Italian, Haifa	—	—	1	—	33	113	175	166	114	175	199
German, Haifa	1	6	467	43	129	189	305	171	657	348	306
Edinburgh Medical Mission Society, Nazareth	—	10	—	—	—	—	1202	254	—	1202	264
French, Nazareth	—	—	—	1	8	—	546	331	—	547	339
Kupat Cholim, Afule	—	2	—	—	—	1963	—	—	1963	—	2
United Free Church of Scotland, Tiberias	—	14	—	—	1	154	801	127	154	801	142
Schweitzer (Rural Sick Benefit Fund), Tiberias	5	1	214	2	—	581	10	1	800	12	2
Hadassah, Safad	—	—	91	1	—	28	—	—	119	1	—
Church Missionary Society, Nablus	—	—	—	1	—	—	569	61	—	570	61
Kupat Cholim, Petah Tiqva	—	—	262	—	—	215	—	—	477	—	—
Total Voluntary Hospitals	45	83	4783	109	697	10663	8792	3658	15491	8901	4438
Government, Jerusalem	—	288	23	60	34	184	1574	693	207	1634	1015
Government, Beersheba	—	1	—	—	—	—	200	19	—	200	20
Government, Jaffa	—	127	86	94	45	88	1719	190	174	1813	362
Government, Bnei Brak	—	—	208	—	—	32	—	—	240	—	—
Government, Haifa	2	236	407	68	55	196	1518	637	605	1586	928
Government, Nablus	—	38	—	3	—	3	1456	26	3	1459	64
Government, Safad	—	52	34	6	1	72	518	48	106	524	101
Government Mental, Bethlehem	—	—	18	—	—	4	9	2	22	9	2
Government Casualty Post, Ramleh	—	2	—	16	1	1	285	18	1	301	21
Municipal, Gaza	—	28	1	4	—	—	498	13	1	502	41
Municipal, Tel-Aviv	—	2	5076	—	2	2140	1	2	7216	1	6
Total Government and Municipal Hospitals	2	774	5853	251	138	2720	7778	1648	8575	8029	2560
TOTAL ALL HOSPITALS	47	857	10636	360	835	13383	16570	5306	24066	16930	6998

*Classification by Religions and Nationality not available.

Maternity Services.

59. The Princess Mary Maternity Wards at the Government Hospital, Jerusalem, continue to be the only Midwife Training School conducted by Government since the plans to develop similar schools at Nablus and Jaffa Hospitals were postponed for financial reasons arising out of the disturbances. Sixteen midwives completed the course of six months' training during the year.

There were 625 maternity cases admitted to the Princess Mary Maternity Wards. There were 602 infants born and 34 dead-births. Maternal deaths were 5. In Haifa and Nablus Government Hospitals, there were 184 and 56 admissions for delivery respectively.

District Infant Welfare Services.

The Department conducts thirty-two Infant Welfare Centres in towns and villages. Voluntary Committees co-operate in Social Welfare Work in association with five of these Centres, and in four other cases, Municipalities participate in the cost of maintenance. Four new Village Centres were opened during the year at Beit Mahsir, Jerusalem District; Tarqumia and Ajjour, Hebron District; and Kfar Kama, Tiberias District.

The Government contributed through the Vaad Leumi towards the maintenance of the Infant Welfare Centres conducted by Jewish Medical organizations. The Jewish Services are extensive and claim to attend to approximately 50% of Jewish infants.

The supervision of practising midwives and the development of district maternity and infant welfare services are undertaken by the Superintendents of Midwifery of the Department who are stationed at Jerusalem, Jaffa, Haifa, Nablus, Gaza and Hebron. The two latter were posted during the year with the object of securing further development of child welfare work and improvement of midwifery services in these backward areas of the country.

Gynaecology.

60. The appointment of two women Medical Officers enabled the extension of gynaecological and ante natal services more especially amongst Moslem women. The services are open to the poor of all communities, but are utilised at present mainly by Arab women, the greater number being Moslems.

The Medical Officers are stationed at Jerusalem and Haifa which are the principle centres for their work, but hold regular weekly clinics at Ramallah and Jaffa in one case, and at Acre and Nablus in the other. In addition to holding gynaecological clinics, they deal with ante natal and post natal cases referred from the district maternity services, treat cases of sickness, malnutrition, etc. arising amongst infants attending the infant welfare centres, and hold special venereal disease clinics for women. In spite of a disturbed year, attendances at the clinics have been large and there is no doubt that this new development meets a real want and provides some relief for women who otherwise would get little or no medical treatment for their disabilities. At present, with existing Government hospital accommodation, it is only possible to allocate one or two beds in each hospital for gynaecological cases, and with the large attendances at the clinics, this provision is inadequate for the number of cases requiring in-patient treatment.

The total attendances at gynaecological clinics were as follows :— Jerusalem 3,685, Ramallah 220, Jaffa 2,915, Haifa 2,567, Acre 2,967, Nablus 1,041. Clinics were commenced also in Hebron and Ramleh, but their development on a regular basis was interfered with by conditions which rendered the travelling of the women Medical Officers from their headquarter stations unsafe. For the same reasons the clinics at Nablus and Jaffa were closed for several months.

INFANT WELFARE 1936.

Location and Supporting Organization	No. of children registered at end of year	Attendances of infants at Centre	Visits by Nurses to infants at Home	Opened in
Jerusalem Government	579	30385	8954	1925
Ramleh, ,,	269	7993	2718	1926
Nablus, ,,	450	11688	5449	1926
Acre, ,,	154	4893	1683	1926
Gaza, ,,	239	9547	3248	1927
Hebron A., ,,	202	5313	2656	1927
Hebron B., ,,	309	7590	3134	1927
Hebron C., ,,	—	299	245	Closed July, 1936
Hebron D., ,,	—	2530	1019	Closed September, 1936
Beit Mahsir, ,,	103	3523	508	September, 1936
Jifna, ,,	160	11460	2648	1928
El Taybeh, ,,	143	6271	2638	1935
Beit Sahur, ,,	177	10934	2427	1934
Beit Jibrin, ,,	155	5386	2080	1935
Doura, ,,	76	2377	939	1934
Tarqumia, ,,	149	2697	1747	May, 1936
Ajour, ,,	72	834	374	September, 1936
Jericho, ,,	110	7774	1866	1933
Beersheba, ,,	181	4770	430	1929
Jaffa, ,,	238	6668	1013	1930
Majdal, ,,	313	5045	2481	1933
Kabri, ,,	149	3245	2751	1934
Beisan, ,,	183	2420	1281	1930
Kfar Kama, ,,	15	560	285	April, 1936
Jenin, ,,	149	5375	3215	1932
Tulkarm, ,,	317	7003	2961	1933
Safad, ,,	290	13852	9799	1934
Ramallah, ,,	176	5585	2538	1925
Bethlehem, ,,	203	8828	3124	1926
Tel-Aviv, Neve Shaanan Qtr., Municipality	1032	12071	2589	1935
,, Shlenov Str., ,,	979	13283	2820	1927
,, Balfour Str., ,,	633	12633	1447	1935
,, Shabazi Str., ,,	408	6474	1961	1935
,, Dizengoff Str., ,,	731	11828	1170	1935
	9344	251134	84198	
HADASSAH MEDICAL ORGANIZATION				
Jerusalem Station A.	119	2618	757	1922
,, ,, B.	490	9537	2889	1924
,, ,, C.	474	8132	2871	1923
,, ,, F.	403	7436	3257	1925
,, ,, G.	335	6492	3283	1928
	1821	34215	13057	

INFANT WELFARE 1936. *(Continued).*

Location and Supporting Organization	No. of children registered at end of year	Attendances of infants at Centre	Visits by Nurses to infants at Home	Opened in
HADASSAH MEDICAL ORGANIZATION (Contd.)	1821	34215	13057	
Petah Tiqva	146	4114	955	1924
Mahne Yehuda	47	913	803	1925
Rehovoth	56	1403	138	Re-opened April, 1836
Shaarayim	87	1906	853	Re-opened April, 1936
Haifa, Station B.	188	6563	737	1926
Haifa, Station C.	123	3561	605	1926
Kiryat Motzkin	16	304	10	July, 1936
Tiberias	201	3712	2238	1924
Safad	7	20	18	Re-opened Nov., 1936
	2692	56711	19414	
JEWISH FEDERATION OF LABOUR				
Ain Hai	20	422	36	1935
Raanana	148	2686	156	1935
Kfar Sava	137	2400	156	1931
Hertzeliya	77	1339	61	1935
Shekhunat Borokhov	93	1959	152	1935
Rehovot	134	1489	243	1935
Ramat Gan	162	3361	183	1935
Haifa, Hadar Hacarmel	724	11404	1142	1935
Kiryat Hayim	284	3508	198	1935
Karkur	5	666	107	1935
Hedera	125	2718	259	1935
Pardes Hana	97	830	31	1935
Yavniel	47	840	—	1935
Kibutz Ein Shemer	25	106	—	1935
,, Mishmaroth	23	192	—	1935
,, Gordonia	12	161	—	1935
,, Gan Shmuel	16	165	—	1935
,, Bulgaria	6	29	—	October, 1936
,, America	14	219	—	1935
	2149	34494	2724	
WOMEN'S INTERNATIONAL ZIONIST ORGANIZATION				
Tel-Aviv, Yarkon Str.,	—	2967	1077	1922
Rishon-le-Tsiyon *(Administered by Hadassah).*	162	3784	625	1928
Nes Tsiyona, (Administered by Hadassah)	—	122	12	1930
Haifa, Station A. (Administered by Hadassah)	304	10250	363	1923
Haifa. Station D. (Administered by Hadassah)	18	606	61	1923
	484	17729	2138	
LOCAL COMMITTEES.				
Jerusalem, American Colony Aid Association	279	12099	3506	1927
Jaffa, Committee of Ladies	253	7472	779	1926
Haifa, Social Service & Infant Welfare Association East	319	5004	402	1925
Haifa, Social Service & Infant Welfare Association West.	231	3045	3180	1933
	.1082	27620	7867	
GRAND TOTALS	15751	387688	116341	

Lunacy.

61. There was a constant demand for admission of cases to the Government Mental Hospitals Nos. 1 and 2 at Bethlehem, but very few new cases could be admitted. The hospitals were constantly full. There are some 179 cases on the waiting list. Only the most severe cases are admitted when vacancies occur.

The Ezrath Nashim Hospital for Jewish paying cases up to a total of 60 was well conducted and constantly full.

There was no commencement made on the construction of the new Government Mental hospital. Plans are complete and site available, but credits were not revoted last year on account of the non-approval of the estimates.

In order to prevent the illegal detention of mental cases in unauthorised homes, a practice which is extending, it is essential that a sufficient provision for mental cases be made by Government without delay.

During the year, there were 3 deaths in Government hospitals, and 2 in the Ezrath Nashim Hospital. 8 patients were discharged from Government hospitals, including 3 cured, 4 improved and 1 "in statu quo" but capable of being attended to at home. 23 patients were discharged from the Ezrath Nashim Hospital, including 4 cured, 17 improved and 6 "in statu quo".

The situation as regards patients in hospitals and awaiting admission at the end of the year was as follows :—

	Arabs	Jews	Total.
In Government Mental Hospitals	73	84	157
In Ezrath Nashim Hospital	—	58	58
Awaiting admission	101	78	179
	174	220	394

The following tables give the classification of the cases admitted by type of insanity and community :—

	Government Mental Hospital	Ezrath Nashim Home
Dementia Praecox	13	—
Dementia Simple	1	15
Katatonia	—	—
Paranoia	1	4
Depressive insanity	2	—
Mania acute	2	—
Mania chronic	1	—
Mania recurrent	1	—
Epileptic insanity	2	1
Epileptic imbecility	2	—
Hysteria	1	—
Idiocy	1	—
Imbecility	1	—
Pellagra insanity	1	—
Drug insanity	1	—
Melancholia	1	1
Other organic insanity	2	2
Dementia senilis	—	1
	33	24

Hospital	Nominal bed strength	Admissions				Deaths	Discharges	Daily average in hospital
		Moslems	Christians	Jews	Others			
Government Mental Hospital No. 1	105	8	2	22	—	3	8	100.8
Government Mental Hospital No. 2	52	1	—	—	—	—	—	51.6
Total	157	9	2	22	—	3	8	152.4
Ezrath Nashim Home	60	—	—	24	—	2	23	59.8
Totals	217	9	2	46	—	5	31	211.2

GENERAL STATISTICAL TABLES, 1936.

				Number of Attendants				Discharged				Average stay of those		
				Resident		Non-Resident								
	Sex	Number admitted during 1936	Daily Average Number during 1936	Employed in attendance on the patients	Employed as servants or only partially as attendants	Employed in attendance on the patients	Employed as servants or only partially as attendants	Cured	Relieved	Not improved	Number of patients who died during 1936	Died in 1936	Discharged in 1936	Remaining at end of 1936
												Days	Days	Days
Government Mentat Hospital No. 1 Bethlehem	Male	5	30.1	11	4	—	5	—	1	—	1	245	153	2262
	Female	27	70.4	18	6	—	8	3	3	1	2	210	754	1686
Government Mental Hospital No. 2 Bethlehem	Male	1	51.6	12	1	—	8	—	—	—	—	—	—	2211
	Female	—	—	—	1	—	4	—	—	—	—	—	—	—
Ezrath Nashim Home, Jerusalem	Male	8	40.0	3	—	2	1	2	5	3	1	367	599	1656
	Female	16	19.8	4	—	6	2	2	8	3	1	71	580	1377
TOTALS		57	—	48	12	8	28	7	17	7	—	—	—	—

Government School Medical Service.

62. The Government School Medical Service was responsible for the care of 378 boys schools, 56 girls schools and 25 mixed schools with a student population of 35,532 boys and of 11,156 girls.

The service is available for any private schools, which make application, as well as for Government and assisted schools.

The Department's service includes inspection of all school premises whether Government, assisted, or private and their sanitary condition reported upon. The majority of the Government schools are situated in leased buildings and the premises are, in general, unsatisfactory and often primitive. The newer village schools built by the villagers are usually simple and satisfactory. Several new schools are under construction, and the trade school at Haifa is now complete.

Agricultural schools at Tulkarm for Arabs and at Mes'ha for Jews are quite satisfactory.

At all schools pupils are given complete physical examination on admission to school and on two subsequent occasions during the curriculum.

Those suffering from eye disease, malaria and skin infections are placed on regular treatment and other ailments are dealt with as they arise.

New pupils are vaccinated against smallpox, and re-vaccinated as required.

Hygiene lectures are routine in all schools, and a satisfactory standard of personal cleanliness is maintained by the teachers who cooperate actively with the medical officer and nurse or tamurgi in maintaining hygiene and in carrying out elementary treatment in eye and skin disease.

In the case of girls schools, special training has been instituted in the larger centres and in the case of the older girls, in mothercraft and in infant welfare. The Superintendents of Midwifery and the Infant Welfare Nurses give regular practical training to the older girls in these two subjects.

The incidence of trachoma amongst pupils is extremely high especially in the southern district. Of all pupils examined in 1936 41.6% of those in town schools, and 55.6% in village schools were suffering from this eye disease. Attendances for routine treatment by teachers and school nurses amounted to 1,856,250 during the year.

With the increased number of schools and pupils in recent years it was found that our medical and nursing staff for schools, especially for village schools was insufficient. Our demand for a larger staff was acceded to in draft estimates, but the estimates for 1936-37 had to be curtailed and no additional staff was finally accorded.

An adequate school medical staff is regarded as most important in the educational development of the children of the country. Instruction in hygiene, the elements of prevention of disease, and the care of infants and mothercraft in girls schools will do more to improve the general health of the population than a multitude of medical practitioners.

The total school population of all schools is given in the following tables :—

SCHOOL MEDICAL SERVICE — 1936.

	Town Schools	Village Schools	Totals
LECTURES TO TEACHERS			
No. of Hygiene Lectures by Medical Officers to Teachers	7	16	23
No. of Teachers Attending Lectures	45	161	206
MEDICAL INSPECTION OF PUPILS			
No. of Children Medically Examined	9826	10395	20221
,, with Trachoma	4087	5783	9870
,, with Other Eye Disease	657	394	1051
,, with Defective Vision	110	87	197
,, with Verminous Head or Body	311	248	559
,, with 4 or more Teeth Badly Decayed	132	63	195
,, with Enlarged Spleen	84	539	623
,, with Heart Disease	33	28	61
,, with Lung Affection	93	92	185
,, with Tuberculous Diseases	14	10	24
,, Mentally Defective	8	—	8
,, Vaccinated and Revaccinated against Small Pox	379	888	1267
OPHTHALMIC TREATMENT			
No. of Attendances of Children for Treatment of Trachoma etc., by Teachers or School Nurses	669544	1186706	1856250

School Medical Service. Medical Arrangements, 1936.

Government Medical Service.

District	No. of Boys Schools	No. of Girls Schools	No. of Mixed Schools	No. of Boys	No. of Girls	Remarks
Jerusalem	25	9	1	3813	2113	
Ramallah	20	4	6	2228	605	
Bethlehem	4	2	2	696	447	
Hebron	20	2	—	1798	503	
Beersheba	6	2	—	539	150	
Jaffa	27	5	2	2742	1210	
Tel-Aviv	—	—	—	—	—	
Ramleh	25	2	—	2524	509	
Gaza	28	4	—	2835	981	
Majdal	20	—	—	1321	—	
Haifa	21	1	5	2806	879	
Acre	28	6	—	2723	836	
Nazareth	13	2	1	1179	437	
Nablus	37	4	1	2008	1043	
Tulkarm	26	4	3	2839	289	
Tiberias	24	5	2	1643	557	
Safad	17	2	—	1467	353	
Jenin	37	2	2	2371	244	
TOTALS	378	56	25	35532	11156	

School Medical Service. Medical Arrangements, 1936.

Jewish Medical Service.

District	No. of Boys Schools	No. of Girls Schools	No. of Mixed Schools	No. of Boys	No. of Girls	Remarks
Jerusalem	31	18	20	6183	5760	
Ramallah	—	—	—	—	—	
Bethlehem	—	—	—	—	—	
Hebron	—	—	—	—	—	
Beersheba	—	—	—	—	—	
Jaffa	—	—	—	—	—	
Tel-Aviv	6	6	130	12007	13892	
Ramleh	—	—	5	242	199	
Gaza	—	—	—	—	—	
Majdal	—	—	—	—	—	
Haifa	2	1	61	4879	4598	
Acre	—	—	1	20	16	
Nazareth	—	—	27	537	468	
Nablus	—	—	—	—	—	
Tiberias	—	—	—	—	—	
Safad	2	1	9	385	387	
Jenin	—	—	—	—	—	
Tulkarm	2	1	24	550	498	
TOTALS	43	27	277	24803	25818	

School Medical Service. Medical Arrangements, 1936.

Schools not Provided for by Government or Jewish Medical Service.

District	No. of Boys Schools	No. of Girls Schools	No. of Mixed Schools	No. of Boys	No. of Girls	Remarks
Jerusalem	27	11	44	4943	4156	
Ramallah	2	1	1	430	357	
Bethlehem	4	—	11	1206	980	
Hebron	4	1	—	825	80	
Beersheba	—	—	—	—	—	
Jaffa	33	6	8	3040	1170	
Tel-Aviv	—	—	—	—	—	
Ramleh	15	1	4	983	405	
Gaza	—	—	1	58	32	
Majdal	—	—	4	121	121	
Haifa	9	2	46	2894	1568	
Acre	22	2	2	1020	144	
Nazareth	12	6	8	1022	903	
Nablus	18	2	7	939	138	
Tulkarm	8	—	5	554	36	
Tiberias	2	1	27	1207	1008	
Safad	2	—	1	127	21	
Jenin	—	—	—	—	—	
TOTALS	158	33	169	19369	11109	

Railway Medical Services.

63.—(a) The railway medical staff has remained the same as last year, viz: the Senior Medical Officer at Haifa; a Medical Officer at Kantara; and seven medical orderlies. The railway clinic, Haifa, has been taken throughout the year by a medical officer from the staff of the Senior Medical Officer, Haifa. The work of the medical orderlies has been carried out loyally and efficiently and, during the political disturbances of the summer of 1936, often in circumstances of danger and difficulty.

The Senior Medical Officer, Railways, has made occasional tours of inspection to Kantara, Jerusalem, Jaffa and Nur-esh-Shams in the course of the year. He has not had the opportunity to visit the Hijaz section during the year under review.

The Medical Officer at Kantara has made regular monthly inspections of the line as far as Lydda, Jaffa and Nur-esh-Shams.

(b) The first aid equipment has been maintained as in previous years, with the addition of a few new first aid boxes to new stations and platelayers posts.

The equipment is reported on monthly, and deficiencies were replenished as soon as discovered.

The ambulance coach has been equipped with electric lights. Since April, 1936, it has been used by the military authorities on several occasions for the transport of sick and wounded troops.

(c) Tests of all main water supplies used on the railways have been made in the course of the year and generally speaking have been found satisfactory.

The chlorinating plant at the Qishon workshops is still not in use, on account of unsuspected difficulties encountered in installing it, and some special parts are still being awaited from the makers. It has taken two years so far to arrive at the present stage in this matter. Delays have been mainly due to the manufacturer. In considering the installation of an automatic chlorinating plant at Kantara, it would be well to get a guarantee of more efficient service of supply before the plant is purchased.

The water supply at the stations in the Sinai Desert has been satisfactory.

The wind-mill pumps mentioned in the last report have been installed in the course of the year .

(d) The railway housing programme for 1936 was almost completely stopped on account of the political disturbances and there is very little progress to report.

Stone built quarters for staff have been built at Bir Yaqob and at Tireh.

The new passenger station at Haifa was started and is still in course of construction.

The improvement of the houses in the Kantara compound has gone on, and is now almost complete.

There still remains a good deal of rehousing to be undertaken at Lydda, and most urgent of all is the provision of adequate staff quarters at Gaza, and improvement of passenger facilities and comforts at Kantara station.

(e) The total number of attendances of railway personnel at the clinics of medical officers was 18,410 and of these, 13,261 were new cases. The corresponding figures for 1935 were 13,537 and 9,920 respectively.

In view of the possible effects of the political disturbances which occupied the months from May to October, it is of interest to analyse the figures as in the following table.

	Haifa Rly. Clinic	Other Clinics	Total	Average per month
January to April	3343	1675	5018	1254.5
May to October	5506	3245	8751	1458.5
November & December	2006	1322	3328	1664.

There was an increase in the middle group of months which continued into November and December, so that it is difficult to correlate it altogether with the disturbances.

The total times "off duty" granted from the clinics amounts to 95,876 days, giving an average per case of 5.2 days.

The corresponding figures for 1934 and 1935 were 1.7 days and 2.1 days respectively. There is thus a very serious jump in the time lost per man sick, and the following analysis is of interest :

Months	Days	Average per man	Average per month
January to April	5414	1.07	1353.5 days.
May to October	74265	8.4	12377.5 days.
November & December	6136	1.8	3068. days.

It will be noted that the jump in the average is entirely accounted for in the months May to October, the months in which the disturbances occurred, and it is difficult to escape the reflection that medical officers were granting more sick leave than was quite justifiable on medical grounds. At the same time it must be appreciated that many of the staff were at this time being subjected to a good deal of pressure and threat, and it is not surprising that symptoms were exaggerated and neuroses were rife and it is often extremely difficult for a medical officer to send back to work a railway worker, who states that he is suffering from some subjective symptoms, knowing that if the man fails in his duties, he may endanger the lives of others.

The attendances for minor ailments and injuries at the dressing stations of medical orderlies total 35,075 which is to be compared with 34,875 in 1935.

(f) The result of the medical examination of men applying for service with the Railways were as follows :—

	Fit	Unfit	Total
Daily Paid Employees			
	267	48	315
Monthly Paid Employees			
	93	23	116

The examinations by medical boards under this heading were much less than in 1935, when 370 applicants were examined.

The total number of examinations by district medical boards for sick leave etc. totalled 344. The work of the district medical board under this heading, increased from 162 cases in 1935 to 344 in 1936.

(g) The cost for the year January 1st, 1936, to December 31st, 1936, amounts to the following :—

(a) Drugs & Dressings	£P.121.778 mils.
(b) General Stores	24.366 mils.
(c) Stationery	7.447 mils.
	£P.153.591 mils.

This figure represents the cost of supplies used at the railway clinic, Haifa; the railway clinic at Kantara; by railway medical orderlies at dressing stations; and in replenishing first aid boxes.

As such, it shows a decrease of £P.55.431 mils on last year, and this decrease is entirely in drugs and dressings and has been effected by enforcing greater economy in the use of these by medical orderlies.

(h) General cleanliness and sanitation has been satisfactorily maintained. There was considerable nuisance from mosquitoes towards the end of the summer. It seems they were mostly breeding in drainage channels closed by badly fitting manhole covers. It is hoped this will not recur next year.

Mention has been made of the water supply, which is still in process of being installed with an automatic chlorinating plant. Tests of bacterial contamination throughout the year were, with few exceptions, satisfactory.

The ambulance service from the Government Hospital, Haifa, has proved adequate, and there have been no complaints as to delay in removing casualties.

Kantara and Sinai Military Railways

(i) Regular monthly inspections of these sections of the Railway have been made by the medical officer, Kantara.

The water plant at Kantara has continued to give good service, but it should be fitted with an automatic chlorinating plant. The sanitary needs of the platelayers posts are still supplied by the open desert, and in spite of every theoretical objection to this, it must be confessed that no obvious harm appears to have resulted therefrom.

Police and Trans-Jordan Frontier Force Medical Arrangements.

64. The health of the Police and Frontier Force has remained generally satisfactory.

There were 395 admissions to hospital from the British Section of the Police with an average stay in hospital of 10.87 days. From the Palestine Section there were 616 admissions with an average stay of 7.11 days in hospital. 197 British Police were sanctioned dental treatment by Medical Boards.

There were 506 admissions to hospital from the T.J.F.F. of which 490 were treated in the Trans-Jordan Frontier Force hospitals. The incidence of malaria among the troops has been high during the year. There were 89 cases of primary and 228 of secondary malaria compared with 112 primary and 166 secondary in 1935. The high incidence can be chiefly ascribed to the troops being on constant patrol work in the Jordan Valley particularly at night, during the period June to November.

Prison Medical Service.

65. The prison accommodation was expanded to its utmost to take in the very considerable number of additional cases as a result of the disturbances.

A concentration camp for political offenders was established first at Auja-el-Hafir and then at Sarafand. The medical supervision and attention required at these camps was considerable, and conducted under frequent reproach from interned persons whose estimate of their own ailment was influenced by their desire for the more comfortable circumstances of hospital.

The average prison population was 1841 in central prisons and 804 in jail labour camps. The health of the prisoners was very satisfactory in spite of the overcrowding both at Acre and at Jerusalem Central Prisons.

Strict attention to hygiene, good food and adequate exercise accounted for the good condition of prisoners.

Jail labour camps were maintained in satisfactory conditions and the health of the prisoners was satisfactory.

There were 226 admissions of prisoners to Government hospitals with an average of 15 days in hospital. 1209 minor cases were treated in the sick detention wards of the central prisons.

There were 12 admissions to the special tuberculosis ward at Acre prison and 15 discharges. There were no deaths.

7 cases were admitted to the Criminal Lunatic Section of Acre prison and 4 returned to prison. There was one death in this section.

In the tuberculosis section, very satisfactory results have been achieved and relative cures are frequent. A satisfactory regime is practised.

The small criminal lunatic section at Acre prison was very well maintained and the mental condition of patients, as a whole, much improved.

At the prison camp at Nur-esh-Shams, further quarters have been built for warders; the camp sanitation has been much improved by the building of septic tanks for sewage disposal; the water supply has been improved by providing an electric pump and better protection of the storage tanks; a sick Bay is still in course of construction.

Training in First Aid to the Injured.

66. Classes of instruction were conducted by officers of the Department under the rules and syllabus of the Order of St. John of Jerusalem for members of various Government departments. The total number of candidates sent forward for examination were 165 compared with 309 in 1935. The principal falling off in numbers taking the classes occurred in the Police Force owing to preoccupation with matters of a more pressing nature during 1936. One hundred and twenty three candidates passed for the St. John's First Aid Certificate. In the more advanced examinations twenty candidates passed the Voucher, eight for the medallion and two for the Label of the Order.

The annual Police Inter-unit First Aid Team Competition for the Wauchope Cup was not held.

FIRST AID EXAMINATIONS — 1936.

	No. of Candidates	Certificate		Voucher		Medallion		Label	
		Passed	Failed	Passed	Failed	Passed	Failed	Passed	Failed
Transjordan Frontier Force	26	14	—	4	8	—	—	—	—
Police	102	76	4	12	—	8	—	2	—
Health	26	23	—	3	—	—	—	—	—
Cthers	11	10	—	1	—	—	—	—	—
TOTAL	165	123	4	20	8	8	—	2	—

Medico-Legal Examinations & Reports.

67. The medico-legal work carried out by medical officers of the Department was as follows :— There were 4168 requests for reports and investigations from the Police, Magistrates and Coroners, involving the medical examination of 4,338 persons, 818 post mortem examinations and the appearance of medical officers to give oral evidence in courts in 1,148 cases. There was a considerable increase in the number of post mortems and of the attendances for oral evidence for which the disturbed condition of the country was responsible. The figures for 1935 were 535 post mortems and 887 attendances at court to give oral evidence.

The Medical Commission.

68. The number of the various examinations carried out by the Central and District Medical Boards has again increased. There were 5978 examinations during the year as compared with 5218 in 1935. The Central Medical Board performed 611 examinations and the District Boards 5367. Of the 611 examinations by the Central Medical Board 489 were to determine physical fitness for Government service, 8 in connection with applications for sick leave, 7 for extension of sick leave, 8 for invaliding from the service and 65 for special examinations or estimation of disability.

The number of examinations carried out among serving Police and recruits were 1226 and among other Government employees 1417. In addition, medical officers made preliminary medical examinations of 1069 candidates for police recruitment; of these 23% did not attain the standard of physical fitness prescribed.

EXAMINATIONS BY MEDICAL BOARDS — 1936.

	Government Officials other than Police				Police									
					Men Serving				Recruits					
	Fit for permanent service	Fit for temporary service	Unfit	Total	Fit for permanent service	Fit for temporary service	Unfit	Total	Fit for permanent service	Fit for temporary service	Unfit	Total	Special & Miscellaneous Examinations	TOTAL
Central Medical Boards	429	60	25	514	1	3	5	9	—	—	—	—	88	611
J'lem District Medical Boards	17	354	55	426	178	2	15	195	198	9	51	258	1609	2488
Jaffa District Medical Boards	350	—	61	411	132	—	2	134	—	—	—	—	658	1203
Haifa District Medical Boards	18	2	—	20	139	10	1	150	188	—	48	236	934	1340
Samaria District Medical Boards	3	38	5	46	3	80	7	90	—	111	43	154	46	336
TOTALS	817	454	146	1417	453	95	30	578	386	120	142	648	3335	5978

The Practice of Medicine, Dentistry, etc.

69. The number of applicants for licences in medicine, dentistry and pharmacy continues to be large. The measures taken to relieve the serious overcrowding of the medical profession by restricting the issue of licences are becoming effective. The total number of medical licences issued was 149 compared with 596 in 1935 and 492 in 1934. The number issued represents 44 persons eligible for licences under the restrictive conditions and the balance persons eligible without restriction. In addition to those licensed, 17 doctors were given provisional permits, 4 of which were subject to the restrictive conditions. There were 2202 doctors holding effective licences at the end of 1936 compared with 2084 at the end of 1935.

There were 84 licences granted to dentists bringing the total holding licences to 573 compared with 493 at the end of 1935. In addition, there were 34 dentists practising on provisional permits pending completion of formalities.

The number of pharmacists holding licences increased from 318 to 362 and midwives from 445 to 484.

LICENCES OF DOCTORS, DENTISTS, *DENTAL PRACTITIONERS, PHARMACISTS, *ASST. PHARMACISTS AND MIDWIVES IN FORCE ON 31st DECEMBER, 1936.

	Number of licences at end of 1935	Number licensed during 1936	Number of licences cancelled during 1936	Cancellation withdrawn during 1936	Number of licences in force at end of 1336
Doctors	2084	149	31	—	2202
Dentists	493	84	5	1	573
Dental Practitioners	30	—	2	—	28
Pharmacists	318	48	4	—	362
Asst. Pharmacists	45	—	—	—	45
Midwives	445	40	4	3	484

*Permits renewable annually.

The following rules affecting holders of medical licences were published and put into effect during the year.

Medical Practitioners (Notification of Address) Rules.

Dentists (Change of Name) Rules.

Dentists (Lost Licences) Rules.

Pharmacists (Notification of Address) Rules.

26 new pharmacies were opened during the year. The total number conducting business at the end of the year was 187 against 161 in 1935.

There are in addition to the regular pharmacies, 25 pharmacies attached to town clinics and hospitals each of which is conducted by a licensed pharmacist; 25 Government dispensaries 7 of which are conducted by licensed pharmacists; over 120 village clinics to which small dispensaries are attached conducted by the Kupat Cholim, the Rural Sick Benefit Fund, different charitable and religious institutions and private doctors, in each of which the dispensing is done by the doctor in charge; 30 wholesale dealers in drugs; 80 establishments licensed to deal in poisons; over 120 dealers in simple drugs, and 20 manufacturing chemists.

A satisfactory standard of equipment, arrangements and maintenance of these establishments has been attained, and compares very favourably with European countries.

Continuous inspection was carried out by a qualified inspector who combines these duties with supervising of the legal trade in dangerous drugs as required under the International Opium Convention.

An examination for Assistant Pharmacists under the Pharmacists Ordinance, was held in March. One local pharmacist assisted the Department by acting as examiner. Two candidates presented themselves for the examination but both failed.

International Opium Convention.

70. The undermentioned ordinances, rules and orders were promulgated during the year in connection with the control of the trade in opium and other dangerous drugs :—

(a) Dangerous Drugs Ordinance, 1936.

(b) Rules made under Section 17 of the Dangerous Drugs Ordinance, 1936.

(c) Rules in respect of Methylmorphine (Codeine) and Ethylmorphine (Dionin) made under Section 15 of the Dangerous Drugs Ordinance, 1936.

(d) Order in respect of Methylmorphine (Codeine) and Ethylmorphine (Dionin) made under Section 15(2) of the Dangerous Drugs Ordinance, 1936.

The Dangerous Drugs Ordinance, 1936, repeals the Dangerous Drugs Ordinance 1925, Dangerous Drugs Ordinance, 1928 and Dangerous Drugs Ordinance, 1932, and brings the local legislation in conformity with the recommendations of the International Opium Convention, 1931, for Limiting the Manufacture and Regulating the Distribution of Narcotic Drugs.

The number of import certificates granted during the year 1936 was 302. The exporting countries were England, Germany, Switzerland, France and Italy.

Actual imports were as follows :—

	Grammes
Medicinal Opium	12,445
Opium in the form of preparations ...	18,650
Morphine and Preparations.	5,705
Diacetylmorphine and Preparations. ...	341
Methylmorphine and Preparations. ...	29,022
Ethylmorphine and Preparations.	3,320
Cocaine and Preparations.	7,004
Eucodal and Preparations.	308
Dicodid and Preparations.	486
Dilaudide and Preparations.	57
Acedicone and Preparations.	2
Indian Hemp in the form of preparations (Tinctures and Extracts)	6,025

In December all licensed pharmacists rendered a return of the amounts of dangerous drugs they had dealt in during the year and gave their estimated requirements for the ensuing year.

12 reports were forwarded to the Permanent Central Opium Board, as follows :—

Annual Report.

Annual Estimates of Imports and Exports of Methylmorphine and Ethylmorphine.

Annual Statistics of Production and Manufacture.

Annual Statistics of Consumption.

Annual Statistics of Confiscations.

Annual Statistics of Stocks.

Annual Estimates of Drugs.

Annual Estimates of Raw Material.

4 Quarterly Statistics of Imports and Exports.

SECTION V.

SANITARY ADMINISTRATION.

Rainfall and Water Supplies.

71. The average rainfall for the whole country for the winter season of 1935-36 was 343 mm. The distribution was as usual very unequal and varied from 37 mm. at Auja-Hafir in the south to 644 mm. at Metulla in the extreme north.

The new water supply for Jerusalem from Ras-el-Ain was introduced early in January. The quantity of water now being delivered to the service reservoirs at Romema is about 1,300,000 gallons a day. The softening and filtration plant was not completed by the end of the year and purification has been effected by means of chloramine which is added to the supply at Saris pumping station which is the last station before the reservoirs. The purity of the supply was maintained at a high level throughout the year. The softening and filtration plant will be ready for use early in 1937 when it will be possible to supply a much softer water than at present. During the summer the main pipe line between Ras-el-Ain and Jerusalem was subjected on several occasions to acts of sabotage but repairs were promptly effected and the reserve held in the service reservoirs was sufficient to prevent any serious interruption in the supply. It now remains to deal with the old and unsatisfactory distribution network in the town.

There has been little advance in the matter of other municipal supplies.

Consulting engineers have had under consideration the matter of the water supplies of Jaffa and Tel-Aviv but up to the end of 1936 no definite proposals had been made by them. It is understood however that they favour either Ras-el-Ain or the Auja River as a source for Tel-Aviv and deep wells in the country inland from Jaffa as a source for that town.

At present the only source which can be relied on in Jaffa is the Bassa bore which is far from meeting the needs of the town. Examination of samples from this source gave satisfactiory results during the year. The Ajami reservoir in Jaffa is still uncompleted.

In Ramleh an attempt has been made to improve the existing distribution system and about 25% of the old pipes have now been replaced. Unfortunately in the case of this town the level of the water in the well has fallen and during the summer water could only be supplied to householders every three or four days and no street watering was possible. Steps were taken by the Conucil to improve matters, but without success, and it is now proposed to develop a new well.

Investigations were continued in the matter of the Haifa water supply and a representative of the consulting engineers arrived in Palestine in May. In July boring was started at Jelameh and in December this bore was delivering 100 cubic metres an hour. In Wadi Fellah where a small bore was sunk last year a plant for a new 16 inch shaft is now ready for work. At Wadi Melek also a plant for boring is now in position.

Improvements were effected to the Hadar Hacarmel Cooperative Society's supply by the installation of a chlorinating plant of the Paterson type. Two smaller suppliers also installed a plant of a similar kind.

Nazareth was again short of water in the latter part of the year, and the sinking of a new well is being considered.

The Hebron supply is still incomplete, but further development by deepening has been effected at the sources.

There has been no further advance in the matter of the Acre supply.

Sanitary Engineering Section.

72. Both urban and rural divisions of this section dealt with a considerable increase in work. The urban section dealt with a large number of plans in connection with establishments proposed for the manufacture of foodstuffs as well as water and drainage schemes referred for opinions. The rural division was principally occupied with antimaliaria drainage works and construction of rural clinics.

Drainage & Sewerage Schemes.

73. A further section of the Jerusalem main drainage was started in October, but due to exceptionally heavy rains which caused flooding of the works, little progress was made up to the end of the year. A total of 3637 metres of 9 inch sewer pipes were laid in 15 quarters of the town. This work was carried out by private individuals under the terms of the Drainage Ordinance. The schemes were designed and supervised by the City Engineer.

Since the introduction of the water supply the urgent need of the town for drainage has been made very obvious by the inadequacy of existing cesspits which are in many cases unable to cope with the increased amount of water to be disposed of. In some cases serious nuisances have resulted.

The consulting engineers' representatives worked during the year on schemes for Jaffa and Tel-Aviv but their reports are not yet to hand. The Department has had on several occasions to emphasise the importance of the early construction of the main interceptor in the Port Area at Jaffa not only for drainage of that area but also for the drainage of the properties immediately behind it. The present conditions in King Faisal Road are most unsatisfactory and cannot be improved until the Port Area interceptor is constructed.

It is hoped that as soon as the consulting engineers' report on drainage proposals for Tel-Aviv is received a decision will be reached to proceed with a scheme. Conditions in that town are very unsatisfactory and call for an early remedy. Meanwhile, a number of temporary drains have been laid in various parts of the town to relieve the most pressing necessities. Unfortunately these schemes have been effected with disregard to the advice of the consulting engineers and this Department.

A representative of the consulting engineers visited Haifa in the spring in the matter of the main drainage and sea outfall but so far no decision has been arrived at to commence work. It has been agreed however to commence the drainage of the slaughter house at an early date. A disquieting feature of the delay is that the pumps on the present temporary outfall are working to full capacity and any breakdown would mean that some two thirds of the town's sewage would empty itself into the harbour.

Good progress has been made in Haifa in the matter of street sewers. 3191 metres were laid in 1936 and most of the slum areas have now been provided with sewers.

Further extensions were made to the Kalkilieh drainage but unfortunately the disposal system has proved inadequate to deal with the amount of water used and it will have to be remodelled in the near future.

Municipal Sanitary Services.

74. Municipal Sanitary Services, already overtaxed, were operated under particular difficulties during the disturbances of last year. Considerable credit is due to the Sanitary Surveyors of the large twns for having been able to keep any service going at all at some periods. These services also had the additional burden of trying to keep the streets cleared of nails and broken glass.

A new Meldrum destructor has been received in Jerusalem and the erection of this will be completed shortly. This is very urgently needed to avoid having to dump a considerable part of the refuse of the city.

In Haifa a new Meldrum destructor of four cells was taken into use in September. This new installation now enables the entire refuse of the town to be disposed of by incineration.

An admirable enterprise of the Sanitary Department in Haifa is the sale to the public, at cost price, of a reasonably cheap, strong and satisfactory type of dust bin. Over 2000 of these have already been bought by the public and it is estimated that by the summer of 1937 over 5000 will be in use.

In both Jaffa and Tel-Aviv the disposal of refuse remains very unsatisfactory. Refuse is still disposed of by uncontrolled tipping. Strong representations have been made in both cases recommending the installation of a modern destructor plant.

In most of the smaller towns scavenging has been reasonably satisfactory but disposal methods are primitive. In Majdal and Gaza matters were not so satisfactory and representations had to be made to the local authorities.

In all towns the routine antimalaria service was carried out by the Department with labour supplied by the Municipal Councils concerned. Despite serious difficulties during the disturbances the work continued without interruption.

Village Sanitation.

75. During the year 4708 latrines were installed in villages. Of these 3829 were of the "bored-hole" pattern and 879 were of the "tar-barrel" pattern. This latter type is used in rocky ground in the hills where boring is not possible.

Scavenging in villages in the absence of rural local authorities makes slow progress.

Trades & Industries.

76. This service was considerably disorganised by the prolonged strike when all Arab establishments remained closed. No licences could be issued or renewed in respect of these premises until the end of the strike in October when an exceptionally large number had to be dealt with. The total arrears had not been cleared by the end of the year.

During the year 14,975 premises were licensed involving 24,088 special inspections. In addition 67,609 routine inspections were carried out. 3938 warning notices were issued and 1309 cases were sent for prosecution. The total number of licences issued shows a decrease of 2134 compared with 1935. This is accounted for partly by the strike, partly by a reduction in the number of hawkers licences approved by the Police, and partly by the fact that all licences in arrears had not been dealt with by the end of the year.

The following additions were made during the year to the schedule of classified trades controlled under the Ordinance.

(a) Establishments for the preparation, patting, packing and storage of butter or other dairy products.

(b) Establishments for slaughtering poultry.

(c) Timber stores (not being customs warehouses).

(d) Carpentry workshops and sawmills not employing power driven machinery and establishments for the retail sale of timber.

The last two were added to the schedule to enable adequate fire protection measures to be laid down.

Special rules for timber storage were enacted during the year and rules governing the storage and handling of cyanide and cyanide products for fumigation purposes are under consideration.

The strike also affected to some extent the work involved under the Public Health (Rules as to Food) Ordinance. The matter of labelling has received considerable attention and steps have been taken to deal with "Full Cream" condensed milks, most brands of which at present imported do not comply with the standard prescribed. The matter of packing and labelling of butter has also been taken up and steps taken to stop the sale of unwrapped butter. Particular attention is being given to the method of handling, transport and inspection of fish brought by the desert route from Baghdad.

The following samples of foodstuffs were taken for analysis:

Milk	2544
Coffee	147
Butter	80
Cream	2
Edible Oils & Fats	258
Cheese	6
Vinegar	1
Beer	2
Aerated Waters	12
Honey	5
Flour	7
Fruit Juice	3
Ice	5
Ice Cream	6
Sausages	3

231 cases were prosecuted and 170 convictions obtained.

NUMBER OF TRADES AND INDUSTRIES IN PALESTINE LICENSED DURING THE YEAR 1936.

Nature of Trade or Industry and Classification in the Schedule under the Trades and Industries Ordinance, 1927.	SUB-DISTRICT OF																		TOTALS
	Jerusalem	Ramallah	Bethlehem	Hebron	Beersheba	Jaffa	Tel-Aviv	Ramleh	Gaza	Majdal	Haifa	Acre	Nazareth	Nablus	Jenin	Tulkarm	Tiberias	Safad	
CLASS I. A.																			
1. Bakeries, public ovens, bread and bakers shops.	111	8	2	23	1	41	103	18	6	12	63	20	21	2	6	10	21	10	478
2. Butchers shops and Tripe shops	137	19	18	14	2	57	153	10	13	21	99	26	23	—	4	13	15	13	637
3. Cold storage establishments	1	—	—	—	—	—	3	—	—	—	1	—	—	—	—	—	—	—	5
4. Confectionery, sweetmeat, jam and preserved fruit establishments including Pastry shops	15	—	—	3	3	10	32	5	9	—	9	17	1	5	—	3	5	4	121
5. Confectionery factories	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1
6. Fish frying shops	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7. Fish shops	11	—	—	—	—	4	43	—	—	—	9	1	2	—	—	—	3	2	75
8. Flour and corn mills	19	14	6	21	—	7	4	—	12	12	13	3	7	—	12	10	2	4	146
9. Grain and cereal shops	15	8	8	25	12	27	28	17	29	8	25	9	4	—	2	13	4	—	234
10. Groceries, flour stores and shops for the sale of vegetables and fruit	890	140	118	146	46	625	787	196	160	147	494	158	134	19	36	110	203	87	4496
11. Ice cream manufacturers, shops and stores	10	—	—	1	—	2	57	—	1	—	11	—	—	—	—	1	—	—	83
12. Macaroni factories	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
13. Milk, butter, cheese and dairy produce shops	28	—	—	—	—	9	59	—	—	—	37	—	—	1	—	—	1	—	135
14. Oil mills and oil stores (other than mineral oil stores)	15	90	8	3	—	1	17	10	2	4	2	2	—	—	2	2	—	—	158
15. Pickle manufactories	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16. Poultry shops	54	—	—	—	—	—	48	—	—	—	3	—	—	—	—	—	2	—	107
17. Preserved fish depots	—	—	—	—	—	1	11	—	—	—	—	—	—	—	—	—	—	—	12
18. Public kitchens	3	—	—	—	—	—	1	—	11	—	—	35	—	—	—	—	—	—	50
19. Aerated water factories	9	—	—	—	—	5	8	1	—	—	5	2	1	—	—	1	1	—	33
20. Factories for the manufacture or preparation of edible oils or fats	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1
21. Factories for canning, curing or preserving meat or fish (including Sausage factories)	3	—	—	—	—	1	13	—	—	—	3	—	2	—	—	1	1	—	24
22. Ice factories and Ice stores	8	—	—	—	—	6	11	—	1	—	13	2	—	—	—	—	1	—	42
23. Sugar refineries and factories, molasses factories	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24. Public markets (excluding horse and cattle markets)	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1	—	3
25. Establishments for the sale of non-alcoholic beverages	29	—	—	—	—	29	134	—	—	—	122	—	1	—	—	—	1	—	316
26. Manufactories of Water Ice (Barrad)	—	—	2	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	4
27. Enterprises for the supply of water by pipe to the public for domestic or industrial purposes	—	—	—	—	—	—	—	—	—	—	5	—	—	—	—	—	—	—	5
28. Carriers and Transporters of Meat, Fish, Ice and Milk	8	—	—	—	—	—	4	—	—	—	—	—	—	—	—	—	2	1	15
29. Factories for the preparation and manufacture of patent flours, baking powder, patent cereal foods, and invalid and infant foods	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30. Factories for the preparation of dried or condensed milk	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31. Factories for the canning or preserving of vegetables or fruit	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	2
CLASS II. A.																			
1. Premises licensed under the Sale of Intoxicating Liquors Ordinance, 1935 and Places of Entertainment licensed under the Public Entertainments Ordinance, 1935	273	10	15	—	1	92	503	12	5	—	286	4	35	3	—	10	50	6	1305
2. Alcohol depots	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
3. Cafes and restaurants not licensed under the Sale of Intoxicating Liquors Ordinance, 1935 or the Public Entertainments Ordinance, 1935	177	13	14	11	11	110	241	44	5	15	119	30	11	4	9	19	23	10	898

NUMBER OF TRADES AND INDUSTRIES IN PALESTINE LICENSED DURING THE YEAR 1936. *(Continued)*.

Nature of Trade or Industry and Classification in the Schedule under the Trades and Industries Ordinance, 1927.	SUB-DISTRICT OF																		TOTALS
	Jerusalem	Ramallah	Bethlehem	Hebron	Beersheba	Jaffa	Tel-Aviv	Ramleh	Gaza	Majdal	Haifa	Acre	Nazareth	Nablus	Jenin	Tulkarm	Tiberias	Safad	
4. Hotels, Lodging Houses and Boarding Houses not licensed under the Sale of Intoxicating Liquors Ordinance, 1935	76	—	—	2	—	28	57	2	2	1	71	—	6	1	3	6	30	10	295
5. Public baths, bathing places and wash houses	10	—	—	4	—	—	3	—	2	—	1	2	—	—	—	—	2	2	26
6. Breweries, wine presses and factories of alcohol, vinegar or any fermented or spirituous liquor	2	—	2	—	—	4	1	2	—	—	2	—	—	—	—	—	—	—	13
7. Establishments where second hand jewellery or second hand household or personal effects are purchased or sold	17	—	—	2	—	—	—	—	4	5	—	—	—	—	—	—	—	—	28
8. Money lending establishments where jewellery and/or other articles of value are taken or held as security for loans	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	2
CLASS II. B.																			
1. Establishments for the retail sale of petroleum, paraffin and mineral oils	11	—	3	3	1	16	221	1	8	4	7	10	11	8	3	8	11	18	344
2. Establishments employing power driven machinery	151	1	11	6	—	75	188	25	2	3	150	24	11	6	—	3	30	—	686
3. Establishments employing steam under pressure	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
4. Garages for motor vehicles (Public garages and garages for Public Vehicles)	23	10	—	8	—	13	3	—	2	1	13	3	12	1	—	—	7	2	98
5. Asphalt and Bitumen Factories	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6. Factories of explosives or of articles containing explosives	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7. Match factories and store houses for matches	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1
8. Stores for explosives (other than ammunition)	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	2
9. Factories for the manufacture of mineral acids and other chemical products and stores for such products	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10. Petroleum, paraffin and mineral oil stores (Including Kerbside Pumps)	25	—	—	3	—	3	19	—	—	4	25	4	4	2	4	2	4	2	101
11. Premises for the repair or sale of firearms or ammunition	5	—	—	—	—	—	—	—	2	—	3	—	1	—	—	—	—	—	11
12. Warehouses for firearms and ammunition	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13. Shops for the sale of explosives	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14. Hawkers	262	28	47	—	7	57	145	10	36	48	538	24	287	6	37	101	128	13	1774
15. Timber Stores (not being Custom Warehouses)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2
16. Carpentry workshops and Sawmills, not employing power driven machinery, and establishments for the retail sale of Timber ...	1	2	—	—	—	—	—	—	4	9	—	—	—	—	—	—	13	—	29
CLASS III.																			
1. Cattle and horse markets	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2. Cattle sheds for dairy purposes	50	—	21	—	—	19	8	—	—	—	193	—	244	—	—	6	20	3	564
3. Cattle sheds other than for dairy purposes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	79	—	79
4. Dairies in which milk and cream are prepared for distribution or Butter or Cheese is manufactured	2	—	—	—	—	1	5	—	—	—	22	—	7	—	—	1	3	—	41
5. Public Stables and Khans and all stables or yards in which animals or birds are kept for commercial or industrial purposes	8	1	2	—	—	1	—	1	—	2	3	2	3	—	2	4	6	—	35
6. Slaughter Houses	1	1	1	—	—	1	1	1	1	—	1	1	1	1	1	1	1	1	15
7. Pigsties and Piggeries	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8. Establishments for the slaughtering of poultry	5	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	7
9. Establishments for the preparation, patting, packing or storage of butter or other dairy produce	2	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	3

NUMBER OF TRADES AND INDUSTRIES IN PALESTINE LICENSED DURING THE YEAR 1936. *(Continued).*

Nature of Trade or Industry and Classification in the Schedule under the Trades and Industries Ordinance, 1927.	SUB-DISTRICT OF																		TOTALS
	Jerusalem	Ramallah	Bethlehem	Hebron	Beersheba	Jaffa	Tel-Aviv	Ramleh	Gaza	Majdal	Haifa	Acre	Nazareth	Nablus	Jenin	Tulkarm	Tiberias	Safad	
CLASS I.B.																			
1. Barbers and Hairdressers	117	13	13	22	6	110	125	40	19	20	130	29	24	2	5	14	21	11	721
2. Dyeworks	1	—	—	3	1	—	—	—	2	14	1	—	—	—	—	—	—	—	22
3. Factories for heating, cording, pressing or otherwise preparing wool, hair or jute for trade purposes	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—	3
4. Laundries and Dry Cleaning Establishments	16	—	—	—	2	10	28	3	1	—	17	4	3	1	—	1	6	—	92
5. Pharmacies and drugstores (including Attars)	56	2	2	2	—	17	98	3	7	—	57	25	10	—	2	13	20	2	316
6. Rag and second hand clothing establishments	10	3	—	4	—	4	5	2	1	—	7	3	3	2	—	—	3	1	48
7. Starch factories	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8. Manufacturing chemists and druggists and manufactories of medical products	1	—	—	—	—	—	14	—	—	—	1	—	—	—	—	—	—	—	16
9. Perfumery and scent manufactories	1	—	—	—	—	2	—	—	—	—	3	—	—	—	—	—	—	—	6
10. Premises on which materials containing poison are made or sold for agricultural purposes	—	—	—	—	—	—	5	—	—	—	—	—	—	—	—	—	—	—	5
11. Public pathological and bacteriological Laboratories	2	—	—	—	—	—	6	—	—	—	4	—	—	—	—	—	—	—	12
12. Factories for the preparation or manufacture of toilet requisites ...	1	—	—	—	—	—	1	—	—	—	2	—	—	—	—	—	—	—	4
13. Stone crushing machinery (portable)	25	1	9	2	—	4	1	—	—	—	1	—	—	—	—	4	—	—	47
CLASS I. C.																			
1. Alkali works	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2. Blood boiling establishments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3. Bone boilers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4. Bone burners	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5. Crematoria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6. Fellmongers (including Furriers)	—	—	—	2	—	—	—	—	3	3	—	—	1	—	—	—	3	1	13
7. Gut scrapers	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	3
8. Knackers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9. Lime Kilns	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5
10. Manure depots including depots for refuse and artificial manure depots and factories	1	—	—	1	—	2	2	—	—	—	—	—	—	—	—	—	—	—	6
11. Potteries, brick works and tile making industries	23	—	1	7	—	9	24	3	2	2	6	—	1	1	—	1	2	—	82
12. Tallow makers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13. Tanneries	4	—	—	4	—	4	1	—	—	—	—	—	—	—	—	—	—	—	13
14. Tripe boilers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15. Candle Factories	2	—	2	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	6
16. Mirror Factories	2	—	—	—	—	2	2	—	—	—	2	—	—	—	—	—	—	—	8
17. Paint Factories	—	—	—	—	—	—	1	—	—	—	2	—	—	—	—	—	—	—	3
18. Paper Factories	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
19. Soap factories (using animal or vegetable oils and fats)	3	1	—	—	—	—	2	3	—	—	2	—	—	12	—	—	—	—	23
20. Tobacco, tombac, cigarettes or snuff factories	2	—	—	—	—	—	—	—	—	—	1	2	1	—	—	—	—	—	6
21. Cement Factories	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
22. Glue factories	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

SECTION VI.

QUARANTINE.

General.

77. Quarantine restrictions were imposed at various times during the year as follows:—

Against Cholera — Arrivals from Calcutta, Bombay, Siam, Ceylon.

Against Plague — Arrivals from Malta, Karachi.

Against Smallpox — Arrivals from Karachi.

The Port of Jaffa was closed during practically the whole period of the strike but at Haifa work proceeded without serious interruption.

The appointment of an additional medical officer for Haifa has now put the service there on a satisfactory basis.

Port Quarantine. Haifa.

78. The port of Haifa is now fully equipped to deal with the deratization of ships. 1957 steamships arrived at the port compared with 1889 in the previous year. In addition 551 sailing ships called. 48,204 persons disembarking at Haifa were notified for surveillance. Of these 22,008 were immigrants. The corresponding figures for last year were 70,649 and 34,945. No persons were detained in the Lazaret. Medical examination, inoculation, vaccination and where necessary disinfection of immigrants was undertaken at the port.

Rat catching in the port area was continued throughout the year. 1281 rats were caught and examined. All except 25 were R. norvegicus. None showed any evidence of plague. Fleas averaged 1.8 per rat and 80.6 of these were identified as x. cheopis.

Jaffa.

79. As a result of the strike the shipping at this port shows a great reduction in the year's figures. 603 steamships called at the port compared with 1129 in 1935. Sailing vessels numbered 273 as compared with 890 in the previous year. The total revenue from quarantine fees etc. fell from £P.8,369.280 mils in 1935 to £P.3,173.050. 8,845 persons disembarked as compared with 35,768 in 1935. Of these 4,523 were immigrants. Examination etc. of immigrants was carried out at the Port as in the case of Haifa.

Air Traffic.

80. Air traffic is becoming increasingly important and the forthcoming concentration of this at Lydda airport will greatly simplify the quarantine service in this connection. At Gaza 462 aircraft called at the aerodrome and 381 at Lydda. The figures for last year were 472 and 347 respectively. At Haifa 56 machines of the Misr Company used the landing ground.

Medical Surveillance of passengers.

81. 57717 travellers entering the country were subjected to medical surveillance and 55042 or 95.36% were traced at their destination.

Moslem Pilgrimage to Mecca.

82. 784 Palestinians and Transjordanians proceeded on the pilgrimage to Mecca via Kantara. Of these 730 were in possession of the special Pilgrim's Laissez-Passer and 54 had ordinary passports. 39 foreign pilgrims passed through Palestine en route for Mecca. All returning pilgrims were subjected to medical surveillance and found in good health except two who were admitted to hospital. One of these was suffering from malignant tertian malaria to which he subsequently succumbed. 5 pilgrims died while in the Hijaz.

MECCA PILGRIMAGE — 1936.

	Vaccinated		Inoculated		Proceeded		Notified of return		Observed on return	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Jerusalem	11	8	11	8	11	8	11	8	11	8
Ramallah	27	26	27	26	27	26	27	26	27	26
Bethlehem	2	1	2	1	2	1	2	1	2	1
Hebron	51	34	51	34	50	34	50	34	50	34
Beersheba	6	1	6	1	6	1	6	1	6	1
Jaffa	56	51	56	51	55	50	54	50	54	50
Ramleh	22	12	22	12	22	12	21	12	21	12
Gaza	31	21	31	21	31	21	31	21	31	21
Majdal	31	23	31	23	31	23	31	23	31	23
Haifa	33	33	33	33	33	33	33	33	33	33
Acre	7	12	7	12	6	12	6	12	6	12
Nazareth	1	—	1	—	1	—	1	—	1	—
Nablus	26	29	26	29	26	29	23	29	23	29
Tulkarm	33	36	33	36	33	34	33	34	33	34
Tiberias	4	2	4	2	4	2	4	2	4	2
Safad	14	21	14	21	14	21	14	20	14	20
Jenin	18	27	18	27	18	27	18	27	18	27
TOTALS	373	337	373	337	370	334	365	333	365	333
	710		710		704 (a)		698 (b)		698 (b)	

(a) 6 did not proceed.
1 Hebron
2 Jaffa
1 Acre
2 Tulkarm

(b) **5 Died.**
1 Jaffa
1 Ramleh
3 Nablus

(b) **1 did not return.**
1 Safad

83. The total number of persons registered as immigrants during 1936 was 31671. Their classification by countries of origin is as follows :—

Immigration.

CLASSIFICATION OF IMMIGRANTS BY COUNTRIES OF ORIGIN — 1936.

Countries of Origin	Total	Jews	Non-Jews
British Empire (excluding Aden & India)	942	329	613
Central Europe	9846	9722	124
Eastern Europe	14969	14950	19
Balkan States	712	686	26
Other European Countries	1648	1420	228
North Africa	563	240	323
Western Asia (including Turkey, India, Iraq, Iran & Afganistan)	2272	1861	411
U. S. A.	395	357	38
Central & South America	260	106	154
Other countries, stateless and undefined	64	56	8
GRAND TOTAL	31671	29727	1944

23,765 immigrants and passengers permitted to remain in Palestine as immigrants were medically examined under Immigration Regulations as follows :—

	Jerusalem	Jaffa	Haifa	Other Centres	Total
Total examinations	751	793	22207	14	23765
No. examined	3.16	3.34	93.44	0.06	—

RECORD OF QUARANTINE PROCEDURE WITH VESSELS — 1936.

	Free Pratique			In Quarantine			Total of Vessels
	No. of S. S.	No. of S. V.	Totals	No. of S. S.	No. of S. V.	Totals	
January	305	16	321	—	—	—	321
February	256	9	265	—	—	—	265
March	270	54	324	—	—	—	324
April	216	99	315	—	—	—	315
May	177	46	223	—	—	—	223
June	157	93	250	—	—	—	250
July	162	227	389	—	—	—	389
August	163	213	376	—	—	—	376
September	183	93	276	—	—	—	276
October	196	114	310	—	—	—	310
November	234	138	372	—	—	—	372
December	246	45	291	—	—	—	291
TOTALS	2565	1147	3712	—	—	—	3712

RECORD OF PERSONS SUBJECTED TO MEDICAL SURVEILLANCE DURING 1936.

Entering Palestine at.	Number Notified	Number found at destination	Number not found at destination	Percentage found
Jaffa by Sea	8845	8709*	136	98.35
Haifa by Sea	48204	45668	2536	94.74
Acre by Sea	—	—	—	—
Gaza by Sea	—	—	—	—
Haifa Air Port	41	41	—	100%
Ramleh Air Port	581	578	3	99.48
Gaza Air Port	46	46	—	100%
TOTALS	57717	55042	2675	95.36

*Includes one with Paratyphoid Fever.

NUMBER OF AEROPLANES LANDING — 1936.

	Gaza	Ramleh	Haifa
January	45	32	—
February	37	28	—
March	40	34	—
April	42	29	—
May	37	31	—
June	37	30	—
July	36	31	—
August	42	31	—
September	41	30	12
October	40	31	20
November	32	34	14
December	33	40	13
	462	381	59

SECTION VII.

RELIEF.

84. As a part of the relief measures instituted by Government for poor persons whose livelihood was seriously affected by the disturbances, the Department was called upon, at short notice, to undertake the issue of rations in kind in Jaffa town.

A special scale of rations was drawn up, contracts for supply arranged, food cards printed and issued to families, and two shops arranged as stores and distributing centres. The certification of needy families and issue of the food cards was undertaken by the District Administration, and the other arrangements were entirely handled by the Department. The preliminary arrangements were completed in four days, enabling the issue of rations to be commenced on the 17th August. This form of relief was continued until the 25th November. To simplify the procedure of issue, children between the ages of 2 years and 12 years were authorised half an adult ration, and issues were restricted to essentials, e.g. bread, rice or lentils, onions, sugar. olives, cheese, olive oil and a small quantity of tea. Families with infants under two years were issued with condensed milk. The cost of an adult ration was 21 mils.

The number of families rationed was 663 representing 2,742 adult rations daily and 72 families received milk for infants.

Relief in the form of additional nourishment was also given at Infant Welfare Centres in the principal towns to nursing or expectant mothers and to debilitated infants.

The Relief measures amongst the Jewish population were administered by locally appointed voluntary Relief Committees to whose fund the Government made contribution on a per caput basis for 204 days.

Public Health Laboratory & Anti-Rabic Service

Survey of Palestine, Jaffa 1937.

Map P.10.0.71

SECTION VIII.

LABORATORY SERVICES.

General.

85. In the Department of Health's Annual Report for the year 1935, the functions of the Department and the manner in which they are carried out were outlined. With regard to laboratory services, it has been the function of the Department :—

(a) to provide for the laboratory diagnosis of disease and to investigate the epidemiological conditions existing with a view to developing measures of control.

The Central Laboratories of the Department are situated in Jerusalem and include fully-equipped bacteriological, serological, entomological, chemical, agricultural and physical laboratories, the central anti-rabies institute and the calf-lymph establishment. The Department has also branch laboratories at Haifa and Jaffa where organization and equipment are designed primarily to meet the requirements of the International Sanitary Convention. The Department exercises supervisory control over other laboratories and scientific institutes maintained by private funds and aproves the issue of annually renewable licences to persons considered qualified to conduct public pathological and bacteriological laboratories.

(b) to carry out the chemical analysis of foods and drugs, waters etc., and to undertake chemico-legal examinations, agricultural analysis and verification of weights and measures.

(c) to prepare calf-lymph, anti-rabic vaccine and other prophylactic and curative vaccines including anti-typhoid, anti-cholera and anti-plague."

Such then in brief are the main duties and responsibilities of the Department's laboratory service.

In addition, however, to the activities outlined, the Central Laboratories undertake the histo-pathological examination of morbid material and all kinds of bio-chemical investigations ; an appreciation of the latter service is reflected in the enormous increase in the number of determinations required now by medical practitioners as compared with that of a few years ago.

Anticipated additions to personnel and special equipment have unfortunately not been realised owing to the six months duration of civil disturbances with their inevitable adverse reaction on budgetary estimates. As a result the laboratories are still in need of a medical officer solely concerned with post-mortem work and histo-pathology and of a senior laboratory assistant to help in dealing with the daily mass of routine. On the other hand, the conclusion of a trade agreement with Egypt in the early part of the year, by which, inter alia, pure olive oil soap, manufactured and exported under Government control, was permitted entry into Egypt at reduced tariff rates, resulted in an increase of establishment by two, viz., an assistant sanitary inspector to control local soap manufacture and an assistant chemist to ensure that all olive oil used in such manufacture should conform to the prescribed standards.

During 1936 the Bacteriological Division has dealt with 253,017 specimens sent for examination; it has prepared 402,600 doses of calf lymph to maintain the million dose reserve required, 145,280 c.c. of killed carbolised antirabic vaccine, 78,670 c.c. of anti-enterica vaccines, 14,530 c.c. of T. and 64,140 c.c. of T.A.B., and 5,190 c.c. of anti-cholera vaccine, a total unit dosage of 631,740. Vaccine issues have included 185,040 doses of calf-lymph, 177,550 c.c. of antirabic vaccine, 79,080 c.c. of T. and T.A.B. and 5,490 c.c. of anti-cholera vaccine. In all, the vaccine issues, including 90 c.c. plague prophylactic totalled 447,070 unit doses. The antirabic vaccine has been issued to 38 different treatment centres where bitten persons numbering 1808 have received advice and attention during the year. The number treated is the largest total yet reached since the inception of the Department's antirabic procedure in 1923.

Although conditions prevailing in the country for one half of the year did much to preclude collection of suitable material and hinder research and epidemiological investigation, nevertheless opportunities have been taken for a continuation of the previous year's enquiry into the prophylactic power of variously-prepared anti-enterica vaccines containing definitely supernormal quantities of Vi antigen. Work on the endemic typhus of Palestine has again commenced and has entailed transmission of several strains of virus from human cases to laboratory animals in which clinical and serological reactions have been studied. In connexion with a sporadic case of relapsing fever contracted by a British soldier while sheltering in a cave a series of animal inoculations and cross-immunity experiments have been carried out to determine whether in fact Spironema types producing relapsing fever are capable of differentiation by cross immunity tests. Again attention has been given to a case of fatal malaria apparently due to a tenue form of Plasmodium falciparum. Investigations have also continued into the degree of virulence possessed by positive cultures of C. diphtheriae. The performance of the Friedman modification of the Zondek-Aschheim test has become routine and has been of considerable service. As in 1935 the strictest laboratory control has been exercised over the Jerusalem public water supply as indeed it has been over all supplies made available for examination.

In the Entomological Division the staff has of necessity been concerned only with the examination of insects of medical importance which have been submitted from different areas in Palestine. Routine identifications and classifications of anopheline mosquitoes, of fleas parasitic on the port rats of Jaffa and Haifa and of fleas collected in rat-infested areas and of sandflies have constituted the greatest part of the work undertaken by the Central and District Laboratories alike. Considerable quantities of insecticide have been prepared and issued during the year to malarious regions.

In the Chemical Division 9188 samples have been examined as compared with 11,194 in 1935. This decrease has to be accounted for by a curtailment of sampling and diminished industrial activities consequent on the protracted period of political unrest. In the agricultural branch investigations in connexion with olive cultivation and local soil problems have been continued. Analytical control of the olive oil used in the manufacture of pure olive oil soap and of the soap itself before export to Egypt under the recent Trade Agreement has been vested in the chemical laboratory. The Government certificate of purity issued on the results of these analyses secured a preferential duty for soap consignments despatched in accordance with regulations approved by the Egyptian Authorities. Sampling under the new Public Health (Rules as to Food) Ordinance 1935 has been reorganised and the regulations are being progressively applied. The number of bio-chemical and agricultural specimens examined has been 1364 and 747 respectively, the number of determinations 1552 and 5051.

The Officer-in-Charge and the Government Analyst have as before given lectures and demonstrations to the Police on laboratory methods employed in the scientific detection of crime. The former is also responsible for the lectures in Forensic Medicine delivered to the Law Classes and has been examiner in Medical Jurisprudence for the Council of Legal Studies and in Physiology and Hygiene for Palestine's Board of Higher Studies for which Board the Government Analyst has also examined in Chemistry.

The Government Analyst has continued in the office of Keeper of the Standard Weights and Measures but as in 1935 no considerable application of the relevant ordinance has been made.

The report is presented under the headings and in the order shown in the subjoined index.

A. BACTERIOLOGICAL DIVISION.

1. Routine Diagnosis.
2. Pathological Findings.
3. Public Health Examinations.
4. Medico-Legal Investigations.
5. Anti-Rabies (Pasteur) Institutes.
6. Calf-Lymph Establishment.
7. General Vaccine Institute.
8. Research.
9. Statistical Tables.

I. Record of Bacteriological Examinations during 1936.

II. Laboratory Findings in Malaria — 1936.

III. Anti-Rabies Service Statistics.

IV. Statement of Rabies Control in Palestine.

V. Control of Rabies — Destruction of Stray Animals.

B. ENTOMOLOGICAL DIVISION.

Routine Duties.

C. CHEMICAL DIVISION.

1. Summary of Work Done.
2. Work undertaken for Government Departments.
   - (a) Public Health and Medical.
   - (b) Police, Criminal Investigation Department.
   - (c) Customs, Excise and Trade.
   - (d) Agricultural and Development.
   - (e) Other Departments.
   - (f) Private Sources.
3. Special Investigations.
4. Weights and Measures.
5. Statistical Tables.
   - A. Samples Examined during 1936.
   - B. Milk Analyses.
   - C. Chemical Service for Agriculture.

A. BACTERIOLOGICAL DIVISION.

Routine Diagnosis.

86. During the year investigations of a routine nature numbering 253,017 have been made — an increase of 28,402 over the 1935 figures; of the total number 33,611 have entailed cultural examination. The type of specimens submitted and the nature of the examinations required are shown in Table I.

(a) BLOOD FILMS.

Table II details the laboratory statistics for 1936. In all 11,500 films have been examined and 911 have proved to be positive for malaria viz., P. vivax 703, P. malariae 8, P. falciparum 200. Based on these figures the percentages of relative frequency have been : benign tertian malaria 77.16, malignant tertian 21,95, quartan 0.89. In 3 cases of relapsing fever the Spironema recurrentis has been demonstrated, while other positive results have included Leishmania tropica 17 times.

(b) BLOOD EXAMINATIONS.

Red and white cell enumerations have totalled 19,845, estimations of the haemoglobin index 9393, differential counts 10,559. Coagulation time has been estimated on 32 occasions and platelets counts on 18. From 5120 specimens received for blood culture the following organisms have been recovered on the number of times indicated. Bact. typhosum 252, Bact. paratyphosum A 25, B 36, Bact. coli once, Streptococcus 20, Str. pneumoniae 3, Staphylococcus 14.

(c) SEROLOGICAL INVESTIGATIONS.

(1) Diagnosis of Syphilis.

The total number of blood specimens received for examination has been 8240 of which 937 have proved to be positive by the Wassermann Reaction (M.R.C. No. 1 Method) and 1143 by precipitation tests. A Departmental campaign against the endemic syphilis prevalent in certain areas of the Jerusalem District has accounted for the considerable increase in specimens over previous years.

(2) Agglutination Tests.

The agglutination content of 21,645 sera has been evaluated. Positive reactions in diagnostic dilutions of patients' sera have been obtained with the following organisms: Bact. typhosum 890, B. para. A 82, B. para. B 152, B. para. C 10, Br. melitensis 13, Br. abortus 19, Proteus X19 368, B. asiaticus (Cast.) 12, B. dysenteriae Shiga 6, Flexner-Y 5 times. Reference to work begun on endemic typhus and serological reactions performed will be made later in this report. Investigations into the Vi antibody content of typhoid sera and estimations of Vi antigen in respect of each Bact. typhosum isolated have been discontinued.

(3) Isohaemagglutination.

Blood grouping has been carried out on 2095 occasions mostly in connexion with the blood-transfusion service but also, on 33 Court exhibits, to ascertain the group to which the blood stains have belonged. Groups A and B sera have been tubed and preserved against the needs of this service.

(4) Complement-fixation tests other than the W.R.

(a) Besredka's reaction has been performed on 20 sera taken from query tuberculous cases with 8 positive results.

(b) Weinberg's test for the detection of echinococcus disease in man has been used in respect of 44 suspected cases with 6 positive findings.

(5) Precipitin Reactions.

In order that differentiation might be made between blood of human origin and blood from other sources 68 precipitin tests have been made. In 29 cases human blood has been demonstrated while in 4 cases the presence of animal blood has been established.

(d) FAECES.

The work has entailed microscopic examination of 20,321 stool specimens, cultural investigation of 9780.

Of the microscopic findings the following are the most important:— *Protozoa*: Entamoeba histolytica (free) 279, E. histolytica (cyst) 359, Giardia intestinalis 470, Trichomonas intestinalis 251, Chilomastix mesnili 24. *Worm ova*: *Nematodes*: Trichuris trichiura 1597, Ascaris lumbricoides 895, Ankylostoma duodenale 179, Enterobius vermicularis 99, Trichostrongylus 18. *Cestodes*: Taenia saginata 193, Hymenolepis nana 148, Diphyllobothrium latum 21. *Trematodes*: Heterophyes heterophyes 197, Schistosoma mansoni 22, Dicrocoelium dendriticum 31.

It is of interest to record that a special hookworm unit working in the Jaffa District made 2968 microscopic examinations for ankylostomiasis, 2450 being first examinations before treatment.

The percentage incidence of hookworm found was 32.4 per cent. (1st exam.).

A detailed account of the unit's activities will be found in the report of the Endemic Section of the Department, which also suggests a more widely spread incidence of schiostosomiasis in the Auja basin than was hitherto believed to exist. S. mansoni would also appear to have found a suitable environment and conditions favourable to its cycle of development in the Southern District.

As a result of cultural examination Bact. typhosum was isolated 53 times, Bact. paratyphosum A and B on 17 and 59 occasions respectively, the dysentery bacteria 726 times, viz., Flexner-Y in 449 cases, Shiga in 100, Strong in 86, Schmitz in 63 and Sonne in 28.

Of 2092 stool specimens examined for occult blood 213 have proved to be positive.

(e) URINES.

Microscopic examinations of the urine have numbered 45,154; ova of S. haematobium have been discovered on 49 occasions, of S. mansoni on 7.

From 3579 catheter specimens the following organisms have been recovered :— Bact. typhosum 14 times, Bact. paratyphosum A 6, B 5, Bact. coli 148 times and Mycobact. tuberculosis 8.

Routine chemical investigations have totalled 48,343.

(f) SPUTA.

Of 4674 specimens of sputa examined microscopically 542 have contained the Mycobact. tuberculosis. Str. pneumoniae has occurred 35 times; there have been 3 cases of Blastomycosis.

(g) PHARYNGEAL SWABS.

These have numbered 11,163, the more important pathological findings being C. diphtheriae 1116 times, Trep. vincenti 94, Str. haemolyticus 115, and Mycobact. leprae from 16 cases of leprosy undergoing treatment in the Moravian Institute in Jerusalem.

(h) URETHRAL SMEARS.

Of 2282 urethral and vaginal discharges examined microscopically 254 have contained the N. gonorrhoeae.

(i) CEREBRO-SPINAL FLUIDS.

Lumbar punctures have totalled 733 and of that number by cultural and microscopic means certain organisms have been incriminated in meningitic conditions, viz., N. meningitidis in 120, Str. pneumoniae in 21, Streptococcus pyogenes in 23, Mycobact. tuberculosis in 3, Bact. typhosum in 2, Haem. influenzae in 8. In the production of the cases of cerebro-spinal meningitis Type I of N. meningitidis was chiefly concerned.

(j) RABIES.

Of 71 brains extracted from suspected rabid animals and forwarded by or on behalf of the Veterinary Authorities 25 have contained Negri bodies.

On 18 occasions the biological test has been carried out and in 12 instances a positive diagnosis of rabies has thereby been established.

No strain of exalted virus has been encountered during 1936.

(k) MISCELLANEOUS.

In 179 conjunctival exudates Haem. Koch-Weeks has been found 45 times, Haem. lacunatus 11, N. gonorrhoeae 4, Str. pneumoniae 21 and C. diphtheriae 11 times.

Of 1084 specimens of abscess pus 3 have been found to contain Actinomyces bovis.

Of 21 films examined 5 have contained B. anthracis. 3580 shaving brushes have been examined and have been proved to be anthrax-free. 35 vaccines imported by local firms have been tested for sterility. 2507 samples of gastric juice have been examined. On 34 occasions Friedman's modification of the Zondek-Aschheim test has been carried out. An interesting case of seminoma (Chevassu) — a large cell testicular tumour — gave a positive reaction before operation: complete removal of the carcinomatous growth and subsequent deep X-ray therapy resulted in later negative reactions.

Of 417 specimens of hair submitted 132 have been shown to be infected with Trichophyton and 19 with Favus.

215 specimens of seminal fluid have been examined for the presence of viable spermatozoa and of the number 76 contained living sperms.

Animal inoculations have totalled 1273 in the bacteriological laboratory, viz., 529 for diagnostic, 203 for experimental and 541 for serological purposes. This number does not, of course, include animals used in the preparation of antirabic, antivariolous and other vaccines.

Allergic reactions have been performed on 4 occasions to determine the origin of intractable asthma.

Reactions to suitable antigens have, in two cases, pointed the way to successful specific treatment.

Dark ground illumination has been employed in 21 cases of primary sore and the colloidal gold test on 18 occasions in cases of suspected general paresis and tabes dorsalis.

In all, miscellaneous investigations during 1936 have numbered 8068 and have covered a wide field of laboratory routine.

Pathological Findings.

87. The total number of specimens received for histological diagnosis has been 622 of which 71 have been examined for the presence of Negri bodies. The principal findings among human pathological conditions are tabulated.

No.	Origin of Tissue	Sex	Age	Nationality	Diagnosis
1	Neck	M	40	Palestinian	Carcinoma
2	Larynx	F	35	,,	Angioma
3	R. forearm	F	23	,,	Spindle cell sarcoma
4	Nose	M	51	,,	Carcinoma
5	Stomach	M	50	,,	Carcinoma
6	Cervix uteri	F	50	,,	Adeno-carcinoma
7	Tongue	M	42	,,	Hyperkeratosis
8	Testicle	M	30	British	Seminoma
9	L. leg	F	30	Palestinian	Carcinoma
10	Neck	M	25	,,	Lympho-sarcoma
11	Neck	M	7	Polish	Haemangioma
12	Breast	F	38	Palestinian	Lipoma
13	Breast	F	42	British	Carcinoma
14	Urethra	F	70	Lebanese	Endothelioma
15	Lower lip	M	15	Palestinian	Fibroma
16	Uterus	F	30	,,	Carcinoma
17	Uterus	F	55	,,	Carcinoma
18	R. leg	F	6	,,	Spindle cell sarcoma
19	Face	F	40	,,	Endothelioma
20	Scalp	M	60	,,	Sarcoma
21	Scalp	F	45	,,	Myxoma
22	Lip	M	61	,,	Epithelioma
23	Leg	F	10	,,	Mixed cell sarcoma
24	Neck	M	21	American	Fibro-sarcoma
25	Uterus	F	35	Palestinian	Fibromyoma

The seminoma has already been referred to under Miscellaneous. Numerous polypi and cystic conditions have been diagnosed.

(a) WATER EXAMINATIONS.

Public Health Examinations.

87. During 1936 the number of bacteriological examinations of water samples (inclusive of ice and aerated water smaples) has been 1352. Laboratory control has been exercised twice-weekly over the new piped supply to

Jerusalem and weekly over the Y.M.C.A. swimming pool built in 1932. An effective system of purification and chlorination has yielded in both cases highly satisfactory results, the Jerusalem water supply showing without exception an absence of B. coli from 100 c.c. and the swimming pool water almost invariably absence from 10 c.c. During the year the potability of various water supplies has been investigated on behalf of the additional troops stationed in Palestine.

(b) MILK EXAMINATIONS.

582 milk samples have been investigated but as in previous years with almost entirely negative results as regards their content of Mycobact. tuberculosis. In only 2 instances did the guinea-pigs subjected to test inoculation show any tuberculous lesion.

(d) ANKYLOSTOMIASIS AND SCHISTOSOMIASIS ENQUIRY.

In accordance with the regulations governing the import of shaving brushes 2580, representing 5 per cent. of all consignments, have been examined. On no occasion has the B. anthracis been detected.

(d) ANKYLOSTOMIASIS AND SCMISTOSOMIASIS ENQUIRY.

It will be noted from Table I that during 1936 laboratory findings include 29 cases harbouring Schistosoma mansoni, 49 S. haematobium and 179 Ankylostoma duodenale.

In addition to these figures, however, the statistics gathered by the special endemic unit investigating these diseases are of interest. Three Arab villages in the Jaffa District have been resurveyed and 2968 examinations made for the ova of A. duodenale. Helminthic incidence among the 2450 primary examinations proved to be 1146 or 46.8 per cent. Percentage of persons infested with A. duodenale was 32.4, with Ascaris lumbricoides 15.5, with *Trichuris trichiura* 3.9, with Hymenolepis nana 7, with Taenia saginata 2.

An additional occurrence of 64 cases of urinary schistosomiasis has been reported in the Jaffa Area, in which area also infections with S. mansoni have been observed.

(e) EXAMINATION OF RATS FOR PLAGUE.

As a routine port procedure and in order to identify the rat fleas of Jaffa and Haifa 1905 rats have been collected and examined bacteriologically for plague. Of the number caught 642 have been trapped at Jaffa port and 1263 at Haifa. On no occasion has Pasteurella pestis been discovered. Of the 642 Jaffa rats 520 have proved to be R. norvegicus, 122 R. rattus; of the 1263 Haifa rats 1235 have been R. norvegicus and 28 R. rattus. The relative percentage of rats collected has thus been R. norvegicus 92 and R. rattus 8. The total number of fleas taken has been 3486, viz., 2776 on R. norvegicus and 710 on R. rattus. The fleas have been identified and are referred to in the report of the Entomological Division.

(f) ENDEMIC TYPHUS.

In continuation of work begun in 1930 investigation into endemic typhus was carried out during the summer months. Strains of virus were transmitted from human patients into rabbits and guinea-pigs and the clinical and serological reactions in these animals were studied.

(g) RELAPSING FEVER.

A sporadic case of relapsing fever occurred among the troops, the disease having been contracted by the patient while sheltering in a cave in the Jerusalem District. A series of experiments was instituted, involving inoculations and cross-immunity tests. O. papillipes, Bir., a known vector in Palestine, is considered to have transmitted the infection.

(a) MISCELLANEOUS EXAMINATIONS.

Only one snake has been sent for identification during 1936: it has been recognised as Vipera xanthina.

The regulation that imported vaccines and sera and other products of bacterial origin are not released from Customs until samples have been sent to the Central Laboratories for examination and have been favourably pronounced upon has led to the examination of 35 such samples.

Although cases of intestinal schistosomiasis of local origin have been observed during the year the intermediary snail hosts have not yet been found and forwarded for identification.

Medico-Legal Investigations.

88. The Central Laboratories have continued to assist the Police Department in criminal investigation. The closest relation between the laboratory and the detective officer exists and the part played by the former has steadily increased in importance, for not only has laboratory technique been devised and perfected for the elucidation of criminological problems but a corresponding appreciation has been shown by the police of the true possibilities of such scientific aid. By means of lectures and demonstrations the police officer becomes perfectly clear in his mind as to the value, as evidence, of any exhibits he may forward to the laboratory and adequate evaluation can best be reached by a discussion of the case with the laboratory officer dealing with the case. In these laboratories it is a rule that every facility is to be afforded to detective officers wishing to consult any of the scientific staff. The field covered by the Bacteriological Division's enquiries has, as usual, been wide: investigations have been made into the nature and origin of stains on clothing, staves, finger-nails, weapons, earth, walls and plaster and have necessitated in 68 cases the performance of corroborative and differentiating tests for blood. On 29 occasions the presence of human blood has been demonstrated on such exhibits and on 4 occasions the presence of animal blood. Blood grouping has been satisfactorily performed 33 times. Investigations have also included the examination of garments for the detection of spermatozoa in cases of rape and sodomy, the determination of the nature of contents expelled from the uterus, the identification of hairs both human and animal and the investigation of post-mortem material taken from cases of death from unknown causes.

The part played by the laboratories in criminological investigation will be best understood by reference to the subjoined analysis of the work carried out.

Type of Exhibit	Reason for Examination	No. of articles investigated
Blood-stained articles	Determination of origin of blood	68
Blood-stained articles	Ascertainment of blood group	26
Blood specimens	For blood grouping	7
Stains on clothing	For presence of spermatozoa	27
Vaginal smears	For spermatozoa	6
Hairs	Whether animal or human	16
Hairs	For comparison	5
Uterine contents	Nature and type	2
Post-mortem material	For pathological changes	2
Food Stuffs	For poisoning	2
Faeces	To determine age	1

The total number of investigations undertaken on behalf of the Criminal Investigation Department has thus been 162. Expert evidence has been given before the Courts when required.

(a) GENERAL.

Anti-Rabies (Pasteur) Institutes.

90. Since 1923 the antirabic vaccine manufactured at the Department's Central Institute in Jerusalem has been a modification of Semple's carbolised killed virus. The success attendant upon its use has justified its continued preparation and the need for alteration to any other form of Pasteurian treatment has never arisen.

Extensive experimental work on laboratory animals with dried cord and etherised vaccines has failed to adduce any evidence in favour of their substitution for carbolised virus. The policy of as complete decentralisation of treatment as possible has been followed and no fewer than 38 provincial health offices have been supplied with adequate issues of vaccine. In each case the vaccine is kept in an ice-chest and if unexpended is returned to the Central Laboratories three months after the date of manufacure shown on the label. The vaccine has been employed in the treatment of human beings and animals (in concentrations of 1 and 5 per cent. virus respectively) by the Government Departments of Health and Agriculture, by non-Government medical organisations such as the Qupat Cholim (a Jewish Medical Benefit Society), by the Government of Trans-Jordan and by the Medical Authorities of the Army and Air Force stationed in the Mandated Territory. Treatment centres so chosen as best to serve the needs of Palestine have been established at Jerusalem, Bethlehem, Hebron, Ramallah, Beersheba, Jaffa, Tel-Aviv (2), Ramle, Majdal, Gaza, Rehovoth, Rishon-le-Tsion, Ness Tsiona, Petah Tiqva, Kfar Saba, Herzlia, Ra'anana, Tel Mond, Haifa (2), Nesher, Acre, Benyamina, Hedera, Karkur, Pardess-Hana, Affula, Nahalal, Nazareth, Nablus, Tulkarm, Nathania, Magdiel, Jenin, Tiberias, Tel Yosef and Safad.

During 1936 there have been prepared 145,280 c.c. of the carbolised killed vaccine and 177,500 c.c. have been issued. Of the total number of bitten persons applying at the several treatment centres for aid and advice, 1808 have received inoculations; of this number 1350 or 77.66 per cent. have been definitely exposed to risk. It is of interest to record that of the 1350 persons attending the centres 1280 or 94.81 per cent. reported for treatment within the first 4 days after the bite and this fact reflects the population's enthusiasm for the specific injections as well as the facilities afforded for such in Palestine.

(b) RESULTS OF ANTI-RABIES TREATMENT.

Table III records the number of persons treated during the year at the 38 provincial centres supplied with the Department's antirabic vaccine. In all 1808 bitten persons have received treatment; in 458 cases, however, treatment has been discontinued after 10 days' injections, the biting animal having remained alive and well at the end of that period of observation. The total number of persons, therefore, to whom a full and regular course of treatment has been given, has been 1350, in other words, the population-at-risk. Of the 1350 only one has died of hydrophobia, symptoms of that disease appearing more han 15 days after the completion of treatment. The percentage of mortality, calculated of course on the number of cases-at-risk only, has been 0.07 in contrast with the 0.13 figure for 1933, 0.48 for 1934 and 0.08 for 1935.

The case of hydrophobia falls under the category of "failure of treatment" as will be seen from the following particulars :—

H.A.B., male, aged 4 years, Palestinian Arab, received one deep and extensive wound on the right arm on 28-1-36 from a dog which ran away. Specific treatment was begun the next day, on 29-1-36, and was regularly administered, the course being completed on 11-2-36. Symptoms of hydrophobia developed on 1-3-36, i.e. 33 days after the date of bite and 19 days after the completion of treatment. Death occurred on 5-3-36. It is noteworthy that another child was bitten by the same dog on the same day; in this case, treatment, also completed and uninterrupted, was successful.

(c) HYDROPHOBIA IN UNTREATED PERSONS.

During 1936 two deaths from hydrophobia have occurred among bitten persons who remained without treatment, local or specific.

Case 1. N.R., male, Jew from Rumania, labourer, aged 16 years, was bitten 4 months prior to his entry into Palestine by a dog. The wound was slight, on the hand, and was received at Oradia in Rumania. The wound was untreated and no specific inoculations were given. The date of bite was 3-6-35, the onset of symptoms on 31-1-36, death on 3-2-36. In this case, then, the incubation period was 241 days, the duration of the disease 3 days.

Case 2. M.D.S., male, Palestinian Arab, villager, 35 years old, bitten severely on face on 4-7-36 by unknown animal ? jackal, developed symptoms on 17-7-36 and died next day. This brief incubation period in untreated cases is not without precedent.

Thus Alivisatos has recorded periods of 10 and 13 days and Konradi periods of 12, 13 and 14 days respectively. It is the opinion of Lubinski and Prausnitz and of Alivisatos that these cases may well be explained by an increased virulence of rabies virus and to this opinion the writer subscribes (vide Jl. of Hygiene, Vol XXXI, No. 4, 31st Oct., 1931, pp. 523-542).

(d) COMPLICATIONS OF TREATMENT.

No complications or sequelae have been observed throughout the year and there has been no case of paralytic accident since 1932, during which period of 4 years 6342 bitten persons have been treated. In this connexion it is of interest to record that of the 16,292 patients to whom carbolised antirabic vaccine has been administered here since 1924 there have been 5 cases of post-treatment paralysis (3 fatal), representing an incidence of 0.3 per 1000. This figure approximates to that recorded at other institutes wherein carbolised virus is employed : thus at Lemberg it has been 0.45, at Lwow 0.43, in the U.S.A. 0.34, at Kasauli 0.27 (among Europeans). It would appear from experience here and elsewhere that the incidence of paralytic accidents shows periodic increases.

(e) OCCURRENCE OF RABIES IN ANIMALS.

87 cases of rabies among animals have been notified during 1936 and from the details published in the Veterinary Bulletins of the Department of Agriculture 43 sub-districts were found to have been affected and 72 localities. The total number of notifications falls short of the 1934 and 1935 figures but this may, to some extent, be due to the difficulty of eliciting accurate information owing to the disturbed condition of the country between April and October. The sub-districts have been differently affected : thus Jaffa as usual with 40 rabid animals far exceeds the total for any other sub-district; it accounts, indeed, for 46 per cent. of the rabies in Palestine. The numbers of animals proved clinically or by laboratory tests to have been rabid in other sub-districts are as follows :— Safad 10, Nablus 6, Gaza 6, Tulkarm 5, Haifa 5, Jenin 4, Ramle 3, Hebron 2, Jerusalem 2, Tiberias 2, Bethlehem 1, Beisan 1. The present year's 87 cases have included 60 dogs, 11 cats, 6 solipeds, 4 ruminants and 6 jackals, representing percentages of 69, 12.6, 6.9, 4.6 and 6.9 respectively. As in previous years the dog has been chiefly incriminated in the dissemination of rabies; thus of the 1350 treated persons definitely exposed to risk of rabies infection 910 or 67.41 per cent. have been bitten by dogs. Other animals incriminated have been cats to the number of 123, jackals 45, solipeds 28, ruminants 48, miscellaneous such as rats, mice, mongoose, fox etc. 196, these other animals showing percentage figures of 9.11, 3.33, 2.07, 3.56 and 14.52 respectively. In addition to the fact that the dog has been responsible for 67.41 per cent. of the bites inflicted upon the population-at-risk, the dog has been the biting animal in 1302 cases out of the total of 1808 persons presenting themselves for treatment and to whom courses of injections have been administered in whole or in part, i.e. in 72 per cent. Other animals in this category of biting have included 145 cats, 45 jackals, 62 solipeds and 52 ruminants, these animals accounting respectively for 8, 2.48 3.43 and 2.87 per cent. of the bites. The only case of hydrophobia in 1936 has resulted from injuries inflicted by a dog. In the classification of bitten persons according to the condition of biting animal 73 have been injured by animals proved to have been rabid by laboratory investigation and 7 by animals clinically diagnosed. As already mentioned, of the 71 brains extracted from suspectedly rabid animals and forwarded by the Veterinary Authorities for laboratory examination 25 have been found to contain Negri bodies. Again, a positive diagnosis of rabies infection has been established in 12 cases out of the 18 to which, for reasons of special interest or importance, the biological test has been applied.

The incidence of rabies among animals has during 1936 reached its peak during October with 16 cases reported, i.e. 18.4 per cent; December has afforded the next highest number with 13 or 15 per cent.; the other months have contributed as follows:— February 11 cases (12.6 per cent.), March, July and August 8 each, September and November 7 each, June 3, January, April and May 2 each.

The wide-spread occurrence of rabies in Palestine will best be appreciated by reference to the sub-joined table :

ANIMAL RABIES DURING 1936.

Month	No. of cases	No. of localities	No. of sub-districts
January	2	2	2
February	11	9	4
March	8	8	4
April	2	2	2
May	2	1	1
June	3	3	3
July	8	8	5
August	8	5	4
September	7	6	3
October	16	10	4
November	7	7	5
December	13	11	6
Total for 1936	87	72	43

During the year little advantage has been taken of the 5 per cent. carbolised suspension specially prepared for the treatment of bitten domestic animals and in previous years attended by satsifactory results.

(f) CANINE PROPHYLACTIC.

The vaccine prepared and issued for the prophylactic inoculation of dogs consists of a 5 per cent. suspension of carbolised killed F-V. brain in N.S.S. and is ordinarily administered in 3 successive daily injections of 5 c.c. In all 74 dogs have been so treated, mostly hounds belonging to the Ramle Vale pack engaged in jackal hunting. Unfortunately one of the hounds used in this somewhat risky pursuit—the jackal being regarded here as the most dangerous of biting animals — contracted rabies some time after the close of the hunting season, but despite this hound's association with the rest of the pack until the development of symptoms no further case occurred. Protective inoculations will in future be given twice yearly.

(g) MEASURES OF CONTROL.

As a result of the closest cooperation among the Government Departments concerned, viz., Police, Agriculture and Health, together with the willing assistance rendered by Municipal Corporations and Local Authorities 10,608 stray dogs, 1346 cats and 1301 wild animals have been destroyed during 1936. Table V, prepared by the Chief Veterinary Officer, illustrates this aspect of rabies control.

Control has further been tightened by the strict application of the Rabies Ordinance of 1934; occasionally, however, the unwillingness of the magistrate to order destruction even in cases where "he is satisfied that the dog, cat or monkey has bitten a person on more than one occasion" has placed obstacles in the way of adequate control. Article 3 of the Ordinance deals with the provision by Municipalities and Local Councils of accommodation for the isolation of dogs etc., and such accommodation has to be constructed in accordance with plans and specifications approved by the Chief Veterinary Officer. At present 19 out of the 29 Councils have made satisfactory provision and those remaining have been asked to include in their next year's municipal estimates funds for kennel construction.

The Calf Lymph Institute.

(a) GENERAL.

91. During the early part of the year calf lymph amounting to 2013.2 grams, the equivalent of 402,600 doses has been produced by the Bacteriological Division of the Central Laboratories. The total issues during 1936

have been less than usual, 185,040 doses only having been requested. The explanation lies in the non-occurrence of small-pox cases in the country and the freedom from threat of invasion by the disease from bordering territories. Prophylaxis, therefore, has been confined to routine primary and secondary vaccinations, the latter chiefly carried out upon immigrants at the ports. The practice of "hiring" instead of purchasing calves has been continued and as animals of from 10 to 12 months can be hired for £P.2 per head considerable economy in the production of calf lymph is effected; it has to be understood that the contractor supplying the calves is responsible for their food and quarantine accommodation without extra charge. The Department's policy of keeping in cold storage sufficient lymph stocks to meet every possible emergency has been maintained and at the end of 1936 the lymph reserve totalled 1,308,000 doses. Although the average yield per calf of lymph pulp is high, potency of the final product is 100 per cent. before issue to the provinces. Potency is further reflected in the fact that out of 47,776 primary vaccinations performed and observed during the year the number of successful insertions was 46,094, this showing a potency figure for the lymph of 96.48 per cent.

The unfailing success of the lymph may be said to depend on two factors: (1) potency tests on all batches so as to ensure full activity at the time of issue and (2) sterility tests so applied that no lymph leaves the laboratories unless it is absolutely free from extraneous organisms. Since the commencement of production in 1924 the number of doses manufactured has been 4,806,136, the number of vaccinations performed nearly 1,500,000. It is satisfactory to record that no case of sepsis or other unpleasant sequela has supervened among the vaccinated.

(b) COST OF PRODUCTION.

(1) Statement of manufacture.

Number of calves hired	40
Number successfully vaccinated	40
Grams of lymph pulp obtained	2013.2
Yield in grams per calf	50.3
Total dosage produced	402,600
Dosage per calf	10,065

(2) Statement of costs.

Hire of 40 calves, including fodder, observation etc.	£P.80.000
Cost per dose (material only)	0.2 mil

(c) SALES.

Lymph sales during 1936 have totalled £P.87.725 and as will be seen have more than balanced the outlay on materials. The product has been distributed to purchasers as follows :— to the Trans-Jordan Government 31,000 doses at £P.77.500 mils, to the Iraq Petroleum Company 800 doses at £P.4 and to the Military Authorities in Palestine 1,245 doses at £P.6.225 mils. For financial reasons supplies to the Trans-Jordan Government have been made at half-price thereby entailing a loss of revenue of £P.77.500 mils.

(d) REMARKS.

An adequate provision of calf lymph of full potency and of proved sterility has continued to be supplied to Government at negligible cost. Its production is undertaken as routine by the personnel of the Bacteriological Division.

A reserve of lymph stocks is kept to equal at least in number of doses the total population of Palestine.

A population so well vaccinated as that of Palestine largely explains the relative freedom from smallpox which the country enjoys.

(a) VACCINES.

General Vaccine Institute.

92. The preparation, standardisation and issue of all prophylactic and curative vaccines required by the Governments of Palestine and Trans-Jordan have, as in previous years, been the responsibility of the Bacteriological Division of the Central Laboratories. In addition to the 177,500 c.c. of antirabic vaccine and the 185,040 doses of calf lymph supplied requests have been met for 79,080 c.c. of anti-enterica vaccines, 5,490 c.c. of anti-cholera and 90 c.c. of anti-plague vaccines. Of the anti-enterica prophylactic 62,250 c.c. of T.A.B. have been isued, 16,830 c.c. of T. The occurrence during

1936 of 1148 cases of typhoid fever (143 deaths) and 170 cases of paratyphoid fever (3 deaths) emphasized the need for the employment of considerable quantities of suitable anti-enterica vaccines. Ordinarily T.A.B. is employed in the vaccination of all case-contacts and in the protection of all immigrants. The anti-cholera vaccine to the extent of 5490 c.c. has been prepared and issued to confer immunity on the Palestine and Trans-Jordan contingents of the Mecca Pilgrimage. The demand for plague vaccine has fortunately been small.

Autogenous vaccines numbering 293 have been used in the treatment of cases suffering from furunculosis and from various affections of the genito-urinary and respiratory tracts.

In certain cases of staphylococcic infection preparations for local application have been made in accordance with Besredka's technique.

The manufacture and issue of vaccines during 1936 is tabulated below.

Nature of Vaccine	Total dosage manufactured	Total dosage issued
Small-pox lymph	402,600	185,040
Anti-rabies	145,280	177,500
Anti-typhoid	14,530	16,830
T.A.B.	64,140	62,250
Anti-cholera	5,190	5,490
Total	631,740	447,110

In the case of small-pox lymph and anti-rabies vaccine considerable stocks had been left over from 1935 thus explaining, in the case of the latter, the disparity between production and issue.

(b) **Sera.**

As previously recorded the preparation of the agglutinating, precipitating and haemolytic sera used in routine diagnosis, complement-fixation tests and in medico-legal investigations has largely been undertaken by the Central Laboratories. Thus a whole series of anti-sera has been manufactured in respect of man and of the commoner domestic and wild animals found in Palestine and Trans-Jordan for use in criminological investigations. Groups A and B sera have also been obtained in considerable quantities from police blood-donors and have been preserved for the necessary grouping in transfusion cases and for the appropriate tests in the forensic laboratory. By the preparation of such sera investigations into cases of murder, manslaughter, rape and disputed paternity have been made possible

For economic reasons the manufacture of therapeutic sera has not been undertaken.

The number of animals required during the year in this sub-division has been 1364, viz., 647 rabbits, 625 guinea-pigs, 40 calves and 52 white mice.

Animal Inoculations.

93. In connexion with further enquiry into the type of Mycobacterium responsible for the tuberculosis in Palestine 43 specimens have been forwarded for animal inoculation and appropriate culture. These have included 4 specimens of cerebro-spinal fluid, 20 of urine, 4 of abscess pus, 7 of joint fluids, 5 of pleural effusions, 3 from glands. Only 3 positive results have been obtained : Mycobact. tuberculosis : human types in urine and in pus; bovine type in cerebro-spinal fluid.

Research.

94. The somewhat unsettled conditions of the country for the six months' period April to October has militated against the carrying out of the normal amount of research work.

Certain investigations, however, have been attempted and brief reference to these follows :—

(1) Enquiry into the prophylactic power of anti-enterica vaccines containing appreciable quantities of Vi antigen has been continued but the results have tallied with those detailed in the Laboratory Services' Report

for 1935. It would appear to be definitely established that between the type of vaccine used (suspensions of bacteria killed by heat, phenol or formalin) and the titre of Vi agglutinin evoked no mutual relation exists. It is true that on occasion Vi agglutinin response was observed but such occurrence was at once inconstant and insignificant.

(2) Work on the endemic typhus of Palestine, largely sporadic in nature, has been continued during the summer months. Now as in 1930-32 strains of virus have been transmitted from human patients into guinea-pigs and rabbits and the clinical and serological reactions in these animals studied. Investigations will proceed during 1937.

(3) A sporadic case of relapsing fever, occurring among the troops and contracted by the victim while sheltering in a cave. instituted a series of animal inoculations and cross-immunity tests. O. papillipes, Bir., is considered to have been the vector. The results of the investigations so far would not be in harmony with a generally-expressed view that types of Spironema causing relapsing fever are capable of differentiation by cross-immunity tests.

(4) In a case of fatal malaria contracted 10 days' after the victim's first exposure to infection there have been studied forms of plasmodia approximating to the tenue type of P. falciparum . All forms of the parasite have been observed during the later stages of the illness.

(5) Examination of all positive cultures of diphtheria has shown a 30 per cent. virulence in the proportions of gravis, mitis and intermediate 10 :60 :30.

B. ENTOMOLOGICAL DIVISION.

General.

95. Entomological work has been confined to routine identification and classification of insects of medical importance; it has been mainly concerned with the identification of anopheline mosquitoes in their larval and adult stages and with the recognition of the various species of Siphonaptera on port rats.

Identification follows the keys prepared by Departmental personnel.

Each of the following mosquitoes has been identified during the year: *A. bifurcatus*, *A. sergenti*, *A. superpictus*, *A. elutus*, *A. algeriensis*. *A. multicolor*, *A. hyrcanus*, *A. pharoensis*.

The rat fleas have included *Xenopsylla cheopis*. *Ceratophyllus fasciatus*. *Leptopsylla segnis* and *Ctenocephalus*.

The fleas on 1905 rats — 1755 (92 per cent.) on R. norvegicus and 150 (8 per cent.) on R. rattus have been collected and found to total 3486. the average number of fleas per rat being 1.8. Of the fleas identified 2776 have been taken from R. norvegicus and 710 from R. rattus.

The following table shows the number and nature of the fleas found on R. norvegicus and R. rattus.

FLEAS FOUND ON PORT RATS.

Fleas on 1755 R. norvegicus		Fleas on 150 R. rattus	
Species	Number	Species	Number
X. cheopis	2451	X. cheopis	639
C. fasciatus	48	C. fasciatus	4
Leptopsylla	243	Leptopsylla	65
Ctenocephalus	34	Ctenocephalus	2
Totals	2776	Totals	710

X. cheopis has, as in previous years, proved to be the commonest rat flea. accounting, indeed, for 88 per cent. of those taken.

Enquiry into the probable relationship between sporadic cases of typhus exanthematicus and the ectoparasites of rats has shown the only rat flea so far encountered to be *X. cheopis*.

Investigation into a case of relapsing fever among the British troops in Palestine has elicited the information that the cave in which the patient had sheltered was infested heavily with *O. papillipes*.

C. CHEMICAL DIVISION.

Summary of Work Done.

96. During the year 9188 samples of all kinds have been dealt with as compared with 11,194 in 1935. This decrease is accounted for mainly by the reduction in the sampling of milk and foods due to the disturbances. In addition much advisory work has been undertaken. In the agricultural branch time has been found to carry out a number of investigations on local soil problems.

(a) PUBLIC HEALTH.

(1) Foods and Drugs.

Notes on Various Branches of Work Undertaken.

97. Of 3276 samples of milk examined 6 per cent. have been found below standard as compared with 4.5 per cent. in 1935.

In the Public Health (Rules as to Food) Ordinance the standards for the composition and labelling of condensed and dried milk are based on those in force in England. Up to the present, however, much of the condensed milk prepared for the Palestine market has been below the English standards and the importers and manufacturers have asked for further time in which to clear old stocks and prepare such as will comply with the new regulations. Of 40 samples of various brands examined at the end of the year 18 were found to be below standard.

Samples of cheese sold as Palestinian produce have consisted of imported cheese incorporated with imported dried milk and other ingredients. As the law stands at present this procedure is apparently not illegal.

Of 9 samples of vinegar examined 7 have not conformed to the standard of requirement on account of deficient acidity and improper labelling. Imitation vinegar is allowed under the regulations, if labelled as such.

A note on imitation honey will be found under "Agriculture". Of the 1808 samples of edible oils and fats examined 1434 have been taken in Customs and these have included only 2 butters and 2 semnis below standard. Of the 374 samples taken from vendors, however, 58 have been below standard. These are classified as under :—

Nature of sample	Number of samples	Number below standard
Butter	83	15
Semni	96	10
Olive oil	133	27
Sesame oil	53	6
Others	9	0
Total	374	58

In addition to the above edible oils 114 samples of olive oil and 62 samples of soap have been examined in connexion with the Government control of approved soap factories exporting olive oil soap to Egypt under the terms of the Trade agreement whereby soap of certified quality is favoured by a lower customs duty. This measure has been introduced with the express purpose of assisting the old established soap-making industry of Nablus.

(2) Drinking Water.

Of the 283 samples of water examined 98 were for drinking purposes. The new Jerusalem supply pumped from Ras-el-Ain springs has a total hardness of 32 with slight variations of which about 20 is temporary (expressed as parts per 100,000 $CaCO3$). A softening plant is now being installed and it is proposed to remove most of the temporary hardness with lime. Samples of local hydrated lime submitted for analysis have indicated that the average purity will be about 80 per cent. $Ca(OH)2$. Laboratory tests with this lime have shown that a dose of 3 lbs per 1000 gallons will reduce the hardness to about 13 parts per 100,000.

(3) Bio-chemical Specimens.

Of the 1364 specimens examined 193 have been from official sources.

This branch continues to develop favourably after having been accommodated in the new laboratory.

Although, due to the disturbances, the number of specimens is lower than in the previous year the first 3 months period (prior to the disturbances) has shown an increase of 33 per cent. over the corresponding period in 1935.

The total number of determinations has been 1552. Out of this 548 were examined for sugar (macro-method Folin-Wu and micro-method Hagedorn-Jensen), 368 for urea (van Slyke), 142 for uric acid (Brown-Herman), 79 for calcium (Kramer-Tisdall). Further examinations were performed for chlorides (Whitehorn), non-protein-nitrogen, cholesterol (Myers and Wardell), bilirubin (van den Bergh), arsenic (incineration process of Strysowski and Gutzeit's test, and for alcohol (Widmark).

Examinations of the urine have included urea, uric acid, chlorides, acetone bodies, diastase, total nitrogen, lactose, urobilinogen, urobilin, bilirubin, arsenic and lead.

62 gastric juices have been examined for free acidity, total acidity and lactic acid.

5 human milks have been examined for total protein, fat and lactose and 3 stools for total fat and free fatty acids.

Of the 548 blood sugar examinations 446 have shown pathological figures. There were some 15 cases of blood sugar over 400 mg. per cent. and 33 cases of over 300 mg. per cent.

Among the 368 cases of urea determinations 109 showed pathological figures. The highest of them was 714 mg. per cent. and two of 424 and 456 mg. per cent. The highest figures were found in Arab patients who are often late in seeking treatment.

With regard to the determination of chlorides in blood and plasma the observation was made that the increase or decrease of chlorides is not very significant in kidney diseases. A hypochloraemia was observed only twice in uraemic cases of very high urea.

Of the 79 calcium determinations performed only 11 showed pathological figures, the highest being 13.2 mg. per cent. and the lowest 5.4 mg. per cent.

Determination of alcohol in vomit was performed to elucidate a case of unconsciousness; also in an estimation of alcohol in blood and urine to determine the state of intoxication in a case of car accident, 2.1 grams per litre were found in the blood and 2.5 grams in the urine.

(4) Medico-legal specimens.

These are included with those received from the Police under the next subheading.

(b) POLICE DEPARTMENT.

(1) Suspected poisoning.

In connexion with the investigation of 20 cases of suspected human poisoning, fatal and otherwise, 78 specimens have been examined. In 13 of these cases the following were found to the number indicated :—arsenic 5, cyanide 1, lysol 1, naphthalene (mothball) 1, veronal and allied drugs 3, alcohol 2.

The disturbances, as usual, have been responsible for numbers of specimens of foods and sweets submitted by the police in cases where reports of suspected attempts at poisoning have been made. 28 such specimens have been examined but have yielded no evidence in support of the suspicions.

Cases of animal poisoning are recorded below under "Agriculture".

(2) Shooting and bombing.

Under the Emergency Regulations the definition of the term explosive has been widened to include certain substances which, though not explosive in themselves, are commonly used as ingredients in the manufacture of explosives and in many cases of seizure the police have submitted specimens for identification. Old military bombs both British and Turkish have also been examined for identification of the filling. A variety of home-made bombs has included tin canisters and cast-iron pipe fittings filled with explosive material carrying a fuse and detonator. Picric acid (lyddite) and gelignite have frequently been identified. The picric acid is presumably obtained from old Turkish shells. One "bomb" examined consisted of about a pound of gelignite carrying a detonator and fuse and was studded all over with largeheaded nails. In one case, where an alarm clock had been converted into an electric time-fuse to fire a large bomb containing picric acid, the back of the clock had been given a coat of bitumen on which finger prints were discernable. These prints unfortunately could not be developed by dusting with powder as the bitumen was "tacky". It was noted, however, by the finger print officer that the prints, if breathed upon, showed, as an effect of condensed moisture, a greatly improved visibility, and the exhibit was brought to the laboratory to see if photographs could be obtained. A special "cold stage" was made and when the exhibit was placed on this the condensed moisture remained long enough for exposures of several minutes and by the use of a 3 inch objective several satisfactory photographs were secured.

In one of the many shooting cases automatic pistol bullets from the scene of the crime have been examined. These were five cupro-nickel coated bullets bearing well-defined rifling marks. In at least 2 of the land impressions and one of the grooves impressions on each bullet secondary markings have been found providing conclusive evidence that all were fired from one pistol. Photographic records have been made which should identify the pistol should it ever be produced for examination.

(3) Other crimes.

Exhibits examined under this heading have included the following:— counterfeiting 10, bribery 15, theft 9, acid throwing 2, arson 23, cutting telegraph wires 4, drug traffic 11.

The fifteen bribery exhibits represent one case in which the police had dusted some marked notes with an aniline dye. The notes were subsequently found in the suspect's car and traces of the same kind of aniline dye were found on his fingers and in his pocket, but the evidence of the prosecution was not good enough to satisfy the court which refused to convict.

The 23 arson exhibits represent 6 cases, in 3 of which traces of kerosene were detected in the partially burned material submitted.

The dangerous drugs identified have included opium, hashish and cocaine.

In testing for traces of copper on a pair of pliers used to cut telegraph wires an electrolytic application of the hydrobromine acid test has been devised. (Analyst 1936, 61, 603.).

(c) CUSTOMS, EXCISE AND TRADE.

Edible oils and facts account for 1434 of the 2498 samples submitted under this heading. Of these 1326 represent imported semni of which only 2 have been below standard, whereas of 96 samples taken from retailers 10 were below standard. This would appear to indicate that most of the adulteration of semni is now done locally. The other samples may be classified as follows:— alcoholic liquors 499, non-fatty food products 61, acid oils (for soap making) 285, pharmaceutical products 50, denaturants for spirits 21, miscellaneous articles of commerce 148.

In addition, much advisory work has been undertaken on questions of classification in the customs tariff, rebate on sugar, the denaturing of salt and other customs and excise matters.

In his capacity as Registrar of Patents, Trade Marks, Designs and Business names, the Director of Customs, Excise and Trade submits to the Government Analyst all patent specifications containing matter of a chemical nature on which he may require advice as to whether the invention is adequately described, whether the claims cover the invention, whether the specification conforms to an original foreign specification and whether the invention is anticipated by previous inventions, specifications of which are submitted for comparison. The number of such specifications submitted during the year totals 55 as compared with 23 in 1935, and this work continues to increase.

(d) DEPARTMENT OF AGRICULTURE AND FISHERIES, DEVELOPMENT DEPARTMENT AND GEOLOGICAL ADVISER.

In spite of the enforced curtailment in agricultural activities and allied development during the greater part of the year, the routine work as measured by laboratory determinations in this branch shows a decrease of less than 10 per cent. The samples dealt with are classified in Table C at the end of this report.

Of the 316 samples of soil examined 59 have been submitted by private cultivators. Time has been found for investigations into the formation of Nazas in a typical red "citrus" soil and the effect of neutral salts on arid soils.

Of the 192 samples of water examined for irrigation purposes 98 have been submitted by the Development Department.

This Department has submitted 15 samples of water from the Samara dam near Beersheba for salinity tests. From the end of January to the end of March the salinity fluctuated between 36 and 85 parts per 100,000 chlorine but by the 2nd of July this had risen to 850. This concentration is due to inflow of saline water as well as to evaporation. A saline spring in the vicinity contained 176 parts chlorine when sampled in January.

Beekeepers have represented to Government the necessity for curtailing the sale of adulterated honey and honey substitutes and as a result legislation is being drafted to make illegal the use of the word "honey" or any inscription suggesting honey in the labelling of imitation honey. At present flavoured invert sugar and glucose syrups are being sold as "artificial honey". Assistance has also been given in drafting grading regulations for export honey.

In the fruit inspection service of the Department of Agriculture and Fisheries the acid/sugar ratio maturity test on citrus has been revised and extended.

These laboratories have cooperated by supplying standard solutions and verifying hydrometers. A member of the inspection staff has also been given facilities for laboratory practice.

Samples of sprayed fruit have been examined for residues of arsenical spray. Of 4 samples of local apples 3 have contained 0.007 and one 0.014 grain per pound arsenious oxide. The amounts found on 4 samples of imported grapes have been 0.001, 0.003, 0.005 and 0.014 grain per pound.

The 22 samples of olives examined have been in connexion with the cultivation experiments which have been in progress since 1932. It is proposed to review the results next year.

The Palestine Railways have submitted 10 samples including six waters. The Government Analyst has been appointed a member of a committee to make recomendations regarding a supply for the Railways in the Lydda area. Technical advice has been given on the classification of goods traffic at the request of the Railway Commercial Manager.

Others making use of the Laboratory Service have included the Departments of Public Works and of Posts and Telegraphs, the military forces and the Trans-Jordan Government.

(e) OTHER OFFICIAL SOURCES.

Special Investigations.

98. Some observations and experiments have been carried out in connexion with pan (Nazas) formation in the local red sandy soils of the citrus belt. The results are consistent with the view that the Nazas is a degradation product brought about by the removal of the binding link between the clay and sand. This link is chiefly calcium which may be removed by the living tree and the base exchange effect of rainfall and irrigation. Subsequent separation of the aluminium and iron result in the appearance of the dark nodules of iron oxide which are the first signs of Nazas formation. Addition of lime, avoidance of excessive irrigation and the use of humus-forming manures are protective measures. A paper on this by Mr. M. Puffeles has been accepted for publication in "Soil Science".

Experiments with arid soils have shown that, as with humid soils, a neutral salt extract has a lower pH value than the corresponding water extract.

This is of significance when considering the effect of the application of saline fertilizers.

The following contributions have been published during the year :—

(1) The problem of chlorosis in citrus trees. M. Puffeles. "Hassadeh" Vol. 16, No. 6 (A local monthly review devoted to mixed farming).

(2) On the cause of cholrosis in a mulberry tree. M. Puffeles. "Hassadeh" Vol. 16 No. 10.

(3) Electrolytic application of the hydrobromine acid test for copper G. W. Baker, "Analyst", 1936. 726. 603.

(4) A preliminary survey of some soils of the Jordan Valley. M. Puffeles. "Hadar" Vol. 9, Nos. 9 and 10.

Weights and Measures.

99. The introduction of the metric system which was the purpose of the Weights and Measures Ordinance of 1928 is still postponed.

TABLE I.

RECORD OF BACTERIOLOGICAL EXAMINATIONS PERFORMED DURING 1936.

Nature of Specimen	Total Examinations	Nature and Number of *Positive Findings*	
Blood Films	11,500	P. vivax	703
		P. malariae	8
		Mixed infections	200
		Spironema recurrentis	3
		L. tropica	17
Blood Cultures	5,120	Bact. typhosum	252
		Bact. paratyphosum A	25
		Bact. paratyphosum B	26
		Stereptococcus pyogenes	20
		Staphylococcus	14
		N. meningitidis	1
Cell *enumerations*	19,845	—	—
Haemoglobin index	9,393	—	—
Differential counts	10,559	—	—
Coagulation time determinations	32	—	—
Histological sections	622	—	—
Water investigations	1,352	—	—
Milk investigations	582	—	—
Sputa	4,674	Mycobact. tuberculosis	542
		Str. pneumoniae	35
		Blastomycosis	3
		Spirochaetosis	2
Naso-pharyngeal swabs	11,163	C. diphtheriae	1116
		S. Vincenti	94
		Str. haemolyticus	115
		Str. pneumoniae	13
		B. leprae	16
		Staphylococcus	209
Rats for plague	1,905	Past. pestis	0
Serum Reactions			
(a) Agglutinations	21,645	Bact. typhosum	890
		Bact. paratyphosum A	82
		Bact. paratyphosum B	152
		Bact. paratyphosum C	10
		Br. melitensis	13
		Br. abortus	19
		Proteus X19	368
		Enteric (type not differentiated)	34
		B. asiaticus Castellani	12
(b) Diagnosis of Syphilis			
Wassermann Reaction	8,240	—	237
Kahn's Reaction		—	1143
(c) Isohaemoagglutination	2,095	—	—
(d) Complement-Fixation Tests			
Besredka's	20	—	8
Weinberg's	44	—	6
(e) Precipitin Tests	66	—	—

Nature of Specimen	Total Examinations	Nature and Number of Positive Findings	
Faeces			
(a) Microscopical Examinations	20,321	E. histolytica (free)	279
		E. histolytica (cyst)	359
		Giardia intestinalis	470
		Chilomastix mesnili	24
		Trichomonas intestinalis	251
		WORM OVA:	
		Ascaris lumbricoides	895
		Trichuris trichiura	1597
		Enterobius vermicularis	99
		Trichostrongylus	18
		Ankylostoma duodenale	179
		Dibothriocephalus latus	21
		Taenia saginata	193
		Hymenolepis nana	148
		Schistosoma mansoni	22
		Heterophyes heterophyes	197
		Dicrocoelium	31
(b) Cultural Examinations	9,780		
		Bact. typhosum	53
		Bact. paratyphosum A	17
		Bact. paratyphosum B	59
		Bact. paratyphosum C	1
		Bact. dysenteriae Shiga	100
		Bact. dysenteriae Flexner-Y	449
		Bact. dysenteriae Strong	86
		Bact. dysenteriae Schmitz	63
		Bact. dysenteriae Sonne	28
Urines			
(a) Chemical	48,343	—	—
(b) Bacteriological	3,579	Bact. typhosum	14
		Bact. paratyphosum B	5
		Bact. coli	148
(c) Microscopic	45,154	Tubercle bacilli	2
		S. haematobium ova	49
Urethral Smears	2,282	N. gonorrhoeae	254
Rabies			
(a) Microscopic Examinations	71	Negri bodies	25
(b) Biological Tests	18	—	12
Transudates and Exudates			
(a) Abscess pus	1,084	Pyogenic organisms	32
(b) Conjunctival exudates	179	Haem. Koch-Weeks	45
		Haem. lacunatus	11
		N. gonorrhoeae	4
		Str. pneumoniae	21
		C. diphtheriae	11
(c) Pleural fluid	236		
(d) Cyst fluid	249	Echinococcus	1
(e) Lumbar puncture	733	N. meningitidis	120
		Str. pneumoniae	21
		Myco. tuberculosis	3
		Streptococcus	23
		Bact. typhosum	2
		Bact. paratyphosum B	1
		Haem. influenzae	8
(f) Syphilitic	21	S. pallidum	2
Substances other than above submitted for examination			
Shaving brushes	2,580	B. anthracis	0
Autovaccines	293	—	—
Medico-legal exhibits	162	—	—
Vaccine for sterility	35	—	—
Fleas	3,486	—	—
Hair	417	Trichophyton	132
		Favus	19
Gastric juice	2,507	—	—
Aschheim-Zondek Tests	12	—	—
Seminal Fluid	215	Viable spermatozoa	76
Colloidal Gold Tests	18	—	—

TABLE II.

LABORATORY FINDINGS IN MALARIA — 1936.

(From 11,500 examinations).

Type and Locality	January	February	March	April	May	June	July	August	September	October	November	December	Total	Yearly
BENIGN TERTIAN MALARIA														
Jerusalem	21	10	13	20	11	12	18	13	11	33	35	18	215	
Jaffa	35	34	55	41	38	37	25	17	26	19	16	23	366	
Haifa	16	8	17	10	25	13	5	8	6	4	6	4	122	
Total recorded	72	52	85	71	74	62	48	38	43	56	57	45	Total	703
MALIGNANT TERTIAN MALARIA														
Jerusalem	6	3	2	1	2	4	7	14	13	18	27	19	116	
Jaffa	—	1	—	—	—	—	4	5	13	9	10	5	47	
Haifa	3	1	—	1	1	—	—	3	3	10	10	5	37	
Total recorded	9	5	2	2	3	4	11	22	29	37	47	29	Total	200
QUARTAN MALARIA														
Jerusalem	—	—	—	—	—	1	—	—	—	—	1	—	2	
Jaffa	—	—	—	—	2	1	—	1	1	1	—	—	6	
Haifa	—	—	—	—	—	—	—	—	—	—	—	—	0	
Total recorded	0	0	0	0	2	2	0	1	1	1	1	0	Total	8
Total Monthly Findings (all forms)	81	57	87	73	79	68	59	61	73	94	105	74	Yearly	911

TABLE III.

ANTI-RABIES INSTITUTE STATISTICS

JANUARY 1ST TO DECEMBER 31ST, 1936.

1. GENERAL CLASSIFICATION.

Number of bitten persons treated at 38 Anti-Rabies Centres	1808
Number of interrupted or unnecessary courses of treatment — biting animals remaining well after a period of 10 days' observation	458
Number of treatments carried out regularly and completely	1350
Cases of hydrophobia occurring after 15 days of the completion of treatment, i.e. failures	1
Cases of hydrophobia occurring during treatment or within 15 days of its completion	0
Total mortality rate; calculated on all deaths among patients who ran definite risk of infection	0.07
Failure rate	0.07

2. CLASSIFICATION OF BITTEN PERSONS ACCORDING TO SPECIES OF BITING ANIMAL :—

Dogs	1302	Solipeds	62
Cats	145	Ruminants	52
Jackals	45	Other animals	202
Wolf	—		

3. CLASSIFICATION ACCORDING TO CONDITION OF BITING ANIMAL :—

A.	Proved rabid by experiment	73
B.	Certified rabid clinically	7
C.	Suspected to be rabid	1270
D.	Not suspected to be rabid	458

4. CLASSIFICATION ACCORDING TO LOCATION OF BITE :

Head and Face	101
Upper Extremity	809
Lower Extremity	836
Body	62

5. CLASSIFICATION ACCORDING TO SEVERITY OF BITE :—

Severe	135
Slight	1591
Not visible	82

6. INTERPOSITION OF CLOTHING :—

On naked skin	1315
Through clothing	493

7. WHETHER CAUTERIZED OR NOT WITHIN HALF AN HOUR AFTER BITE :—

Cauterized	260
Not Cauterized	1548

8. NUMBER OF DAYS AFTER BITE OR CONTACT WHEN TREATMENT WAS BEGUN :—

0— 4	1695
5— 7	69
8—14	32
15—21	4
Over 21	8

9. OCCURENCE OF PARALYTIC ACCIDENT :— NIL.

TABLE IV. — STATEMENT OF RABIES AND ITS CONTROL IN PALESTINE DURING 1936.

Centre for treatment	Bitten Persons		BITING ANIMALS																															
			SPECIFICATION																	CONDITION					DISPOSAL									
																				Definitely rabid					Killed				Ran away				Kept under observation	
	Number applying for advice and aid	Number actually treated	Weasels	Cats	Dogs	Foxes	Jackals	Horses	Donkeys	Camels	Goat	Human beings	Sheep	Monkeys	Pigs	Rabbits	Rats	Cows	Unknown	Total number of animals	By laboratory investigation	Clinically	Suspected rabid	Healthy	No information available	Rabid	Suspected	Healthy	No information available	Rabid	Suspected	Healthy	No information available	Died within 10 days	Remained healthy
Jerusalem	179	90	—	21	65	—	—	—	—	2	—	—	—	1	—	—	—	—	—	89	3	—	5	28	53	3	5	—	—	—	—	—	53	—	28
Bethlehem	30	6	—	—	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	—	—	—	5	1	—	—	—	—	—	—	—	1	—	5
Hebron	60	60	—	1	48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	49	—	1	8	1	39	1	3	—	—	—	5	—	39	—	1
Ramallah	4	4	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	—	2	—	2	—	2	—	—	—	—	—	2	—	—
Beersheba	8	8	—	—	6	—	—	—	—	2	—	—	—	—	—	—	—	—	—	8	—	—	—	3	5	—	—	—	—	—	—	—	5	—	3
Jaffa	319	319	—	35	232	—	6	8	4	—	—	—	—	1	—	—	26	—	—	312	3	1	16	91	201	3	8	—	—	1	4	—	201	4	91
Tel-Aviv	88	88	—	7	72	—	1	—	1	—	—	—	—	2	—	—	5	—	—	88	—	1	3	34	50	—	—	—	—	1	—	—	50	3	34
Tel-Aviv, Kupat Cholim	44	44	—	7	31	—	1	—	—	—	—	—	—	1	—	—	3	—	—	43	1	—	3	9	30	1	1	—	—	—	—	—	30	2	9
Ramle	132	132	—	6	100	—	—	1	5	—	—	—	—	—	—	1	—	—	1	114	1	—	11	10	92	1	5	—	—	—	4	—	92	2	10
Majdal	27	27	—	1	22	—	—	—	—	1	—	—	—	—	—	—	—	—	—	24	—	—	8	1	15	—	7	—	—	—	1	—	15	—	1
Gaza	38	38	—	—	29	—	1	—	3	—	—	—	—	—	—	—	—	—	—	33	3	—	3	1	26	3	2	—	—	—	1	—	26	—	1
Rehovoth, Kupat Cholim	6	6	—	—	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	—	—	—	3	3	—	—	—	—	—	—	—	3	—	3
Rishon-le-Tzion, Kupat Cholim	11	11	—	3	7	—	—	—	—	—	—	—	—	—	—	—	1	—	—	11	1	—	1	—	9	1	—	—	—	—	—	—	9	1	—
Ness-Tziona, Kupat Cholim	16	16	—	2	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	—	—	—	6	9	—	—	—	—	—	—	—	9	—	6
Petah-Tiqva, Kupat Cholim	75	75	—	9	54	—	2	—	4	—	—	—	—	—	—	—	4	—	—	73	—	—	6	23	44	—	3	—	—	—	3	—	44	—	23
Kfar-Sava, Kupat Cholim	37	37	—	4	22	—	2	2	2	—	—	—	—	—	—	—	2	2	—	36	—	—	8	18	10	—	4	—	—	—	3	—	10	1	18
Herzelia, Kupat Cholim	15	15	—	4	8	—	—	—	1	—	—	—	—	—	—	—	1	—	1	15	—	—	3	5	7	—	—	—	—	—	—	—	7	3	5
Ra'anana, Kupat Cholim	5	5	—	—	2	—	1	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	2	—	1	—	—	—	—	—	1	—	1	1	—
Tel-Mond, Kupat Cholim	8	8	—	2	5	—	—	1	—	—	—	—	—	—	—	—	—	—	—	8	—	—	—	5	3	—	—	—	—	—	—	—	3	—	5
Haifa	278	276	—	9	145	—	7	2	3	—	—	1	—	—	—	1	94	—	1	263	1	—	18	56	188	—	8	—	—	—	9	—	188	2	56
Haifa, Kupat Cholim	67	67	—	4	50	—	—	—	—	—	—	—	—	—	—	—	13	—	—	67	—	—	3	13	51	—	2	—	—	—	—	—	51	1	13
Nesher, Kupat Cholim	3	3	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	1	1	1	—	1	—	—	—	—	—	1	—	1
Acre	9	9	—	—	8	—	—	—	—	—	—	—	—	—	—	—	1	—	—	9	—	—	—	5	4	—	—	—	—	—	—	—	4	—	5
Binyamina, Kupat Cholim	15	15	—	—	10	—	1	—	1	—	—	—	—	—	—	—	—	—	—	12	—	—	4	2	6	—	3	—	—	—	1	—	6	—	2
Hedera, Kupat Cholim	42	42	—	—	14	—	4	1	—	—	—	—	—	—	—	—	7	1	—	27	—	—	8	6	13	—	4	—	—	—	3	—	13	1	6
Karkur, Kupat Cholim	25	25	—	2	11	—	1	—	—	—	—	—	—	—	—	—	2	1	—	17	—	—	3	1	13	—	2	—	—	—	1	—	13	—	1
Pardess-Hana, Kupat Cholim	2	2	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—
Affula, Kupat Cholim	2	2	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	1	1	—	—	—	—	—	—	—	1	—	1
Nahlalal, Kupat Cholim	3	3	—	1	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	3	—	—	—	1	2	—	—	—	—	—	—	—	2	—	1
Nazareth	20	20	—	2	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19	—	—	—	12	7	—	—	—	—	—	—	—	7	—	12
Nablus	83	83	—	2	58	—	1	—	1	1	—	—	—	—	—	—	—	—	—	63	—	—	10	28	25	—	8	—	—	—	2	—	25	—	28
Tulkarm	56	56	—	4	35	—	4	6	3	1	—	—	—	—	—	—	—	—	—	53	—	—	11	27	15	—	7	—	—	—	4	—	15	—	27
Nathania, Kupat Cholim	3	3	—	—	2	—	1	—	—	—	—	—	—	—	—	—	—	—	—	3	1	—	1	1	—	1	—	—	—	—	1	—	—	—	1
Magdiel, Kupat Cholim	25	25	—	3	15	—	1	—	1	—	—	—	—	—	—	—	4	—	—	24	1	—	1	3	19	1	—	—	—	—	1	—	19	—	3
Jenin	32	32	—	—	25	—	1	—	1	—	—	—	—	—	—	—	—	—	2	29	—	—	9	—	20	—	8	—	—	—	1	—	20	—	—
Tiberias	82	82	1	4	46	—	—	1	4	—	—	—	—	—	—	—	7	1	—	64	1	—	9	33	21	1	6	—	—	—	1	—	21	2	33
Tel-Yosef, Kupat Cholim	5	5	—	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	—	—	—	5	—	—	—	—	—	—	—	5	—	—
Safad	69	69	—	2	26	—	—	—	1	2	1	—	—	—	—	—	—	—	—	32	5	—	2	14	11	4	1	—	—	—	—	—	11	2	14
TOTAL	1923	1808	1	137	1204	—	35	22	35	9	1	1	—	5	—	2	171	5	5	1633	21	3	160	447	1002	20	91	—	—	2	46	—	1002	25	447

TABLE V.

CONTROL OF RABIES

DESTRUCTION OF DOGS, CATS AND WILD ANIMALS (JACKALS, FOXES, ETC.)

1st January to 31st December, 1936.

Sub-District	Municipal and Local Council Areas			Rural Area			Total
	Dogs	Cats	Others	Dogs	Cats	Wild animals	
Jerusalem	766	77	—	452	3	45	1343
Ramallah	9	2	—	589	—	77	677
Bethlehem	10	—	—	46	—	75	131
Jericho	32	2	—	86	26	69	215
Hebron	30	—	—	646	—	—	676
Jaffa	2096	1120	—	205	25	570	4016
Ramle	96	—	—	329	—	—	425
Gaza	278	—	30	810	—	30	1148
Beersheba	31	—	—	7	—	—	38
Nablus	3	25	25	618	—	105	776
Jenin	20	—	—	450	—	45	515
Tulkarm	47	—	—	198	—	230	475
Haifa	364	4	—	2	—	—	370
Acre	—	—	—	—	—	—	—
Tiberias	76	20	—	293	—	—	389
Nazareth	191	17	—	318	22	—	548
Beisan	46	—	—	554	—	—	600
Safad	6	3	—	904	—	—	913

SUMMARY:	Dogs	10,608
	Cats	1,346
	Wild animals	1,301
	TOTAL	13,255

TABLE A.

SAMPLES EXAMINED DURING 1936.

Material	January	February	March	April	May	June	July	August	September	October	November	December	Total
Milks	297	366	325	330	306	248	246	168	200	242	283	265	3276
Foods	223	165	230	199	124	93	114	196	142	233	341	220	2280
Alcoholic Liquors	45	16	33	40	—	—	33	60	—	1	54	228	510
Non-Alcoholic Beverages	—	1	3	1	1	1	9	1	4	1	—	—	22
Drugs and Disinfectants	3	3	5	3	2	1	1	4	5	10	10	6	53
Bio-chemical Specimens	137	127	164	109	96	83	133	125	103	86	122	79	1364
Medico-legal and Chemico-legal	47	19	19	55	47	15	40	17	16	59	12	5	351
Waters	27	39	65	18	9	11	22	15	15	21	12	29	283
Minerals, soils, fertilizers and feeding stuffs	18	98	7	81	1	12	68	18	1	3	37	7	351
Commercial Products	70	77	59	81	43	29	30	21	35	51	96	83	675
Miscellaneous	3	—	—	—	—	—	18	—	—	—	—	2	23
Total	870	911	910	917	629	493	714	625	531	707	967	924	9188

TABLE B.

MILK ANALYSIS IN THE CENTRAL LABORATORIES AND DISTRICTS—1936.

District	Number of Samples	Number of Prosecutions
JERUSALEM		
Hospital Supplies	289	15
Street Vendors	136	
JAFFA		
Hospital Supplies	6	1
Street Vendors	94	
RAMLE		
Hospital Supplies	—	4
Street Vendors	57	
GAZA		
Hospital Supplies	23	3
Street Vendors	72	
TULKARM	36	—
HAIFA		
Hospital Supplies	62	131
Street Vendors	979	
ACRE	57	1
NABLUS		
Hospital Supplies	323	7
Street Vendors	82	
TIBERIAS	190	24
HEBRON	36	—
BETHLEHEM		
Hospital Supplies	182	7
Street Vendors	211	
RAMALLAH	212	—
BEERSHEBA		
Hospital Supplies	—	—
Street Vendors	43	
SAFAD		
Hospital Supplies	41	3
Street Vendors	145	
TOTAL	3276	196

TABLE C.

CHEMICAL SERVICE FOR AGRICULTURE.

SOURCE.

Nature of Samples	Dept. of Agriculture	Dept. of Development	Geological Adviser	Other Official Sources	Private Sources	Total Samples	Determinations
Soils	89	158	—	—	59	316	3342
Fertilizers and Manure	5	—	—	1	1	7	50
Waters	6	100	33	50	3	192	901
Honey	3	—	—	5	—	8	46
Olives	22	—	—	—	—	22	148
Geological Specimens	—	—	19	—	—	19	78
Veterino-legal specimens	40	—	—	6	21	67	109
Poultry foods	5	—	—	—	1	6	15
Preserved Fruit and Apples	21	—	—	2	—	23	24
Bees Wax	1	—	—	—	—	1	4
Flour	4	—	—	22	—	26	54
Cane sugar	6	—	—	—	—	6	24
Lime	—	—	—	3	—	3	3
Rice meal	—	—	—	1	—	1	6
Rusks	1	—	—	—	1	2	4
Grape-Fruit Juice	18	—	—	—	6	24	54
Citrus leaves	—	18	—	—	—	18	180
Clay	—	—	1	—	—	1	3
Tobacco	—	—	—	5	—	5	5
Table salt	—	—	—	1	—	1	1
TOTAL	221	286	53	96	92	748	5051

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